

**What Bone Shall Speak for Me? Seeking the Language of Bones:
A Photographic Investigation.**

by

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Abstract

Through the media of analogue and digital imagery and the discipline of theoretical research, this project investigates skeletal remains to elucidate their language by examining them in evolutionary, historical, cultural and ritual contexts.

In the context of this exegesis skeletal remains are indicated as metaphors for narrative and language. The exegesis discusses the manner in which bones are subject to a form of metamorphosis that is influenced and directed by the languages used to describe them, which in turn are directed by the position, experiential history and cultural background of the viewer/interpreter. These concepts are investigated in the context of artistic practice, with reference to the work of Henry Moore, Harry Nankin, J. John Priola, Stephanie Valentin and others.

The outcome of the research project is realised in a visual arts exhibition. The wall mounted images, the specimen book of images and the shelf installation of bones with different objects all allude to the essential ambiguity and fluidity of the nature of bones and the languages associated with and imposed on them.

In seeking the language of bones, the exhibition reveals that the reply to the question What bone shall speak for me? is as individually subjective and mutable as the images and objects suggest.

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**What Bone Shall Speak for Me? Seeking the Language of Bones:
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A.D. Hope (1907 – 2000)

Professor of English, Canberra University College, 1951 – 1968.

Meditation on a Bone.

A piece of bone, (circa AD 1050) found at Trondhjem in 1901, with the engraved Runic inscription: 'I loved her as a maiden; I will not trouble Erlend's detestable wife; better she should be a widow.'

¹

This poem has been removed for
copyright or proprietary reasons

¹ *The Double Looking Glass: New and Classic Essays on the Poetry of A. D. Hope*, David Brooks (ed), St. Lucia, University of Queensland Press, 2000



Fig 1

Reconstructed cast of Upper Palaeolithic (20,000 BCE) burial of teenage boy with artefacts of mammoth ivory pendants and a flint blade. Arene Candide, Italy.

Introduction

Skeletal remains have fascinated me since childhood, when from an island I collected my first remnant – a horse's jawbone washed clean and white by the actions of the sea and sand. Apart from it obviously being a horse remnant (I was at that age horse – mad), I also perceived it as an object of beauty. It was the first piece of a large collection gathered throughout my childhood that sadly, I had to leave behind when I emigrated from New Zealand to Australia. I now have an even larger collection which has provided a valuable resource for image making.

The aim of my research project is to discover and define a language of bones. I consider that skeletal remains act as receptacles or mediums for language, of which narrative is an integral element that can describe evolutionary, historical, cultural and ritual practices and concepts. The languages associated with bones can be altered, enhanced and extended depending on their association with related objects, and the contexts in which they are found or placed. Skeletal remains, apart from being a common signifier of death, I consider are also objects of utilitarian beauty that silently communicate the living history of the organisms they once supported. To quote Darwin: 'bones murmur their owner's story with an almost living tongue.'²

The poignancy of the last line of Hope's poem 'What Bone Shall Speak for Me'? particularly resonated with my interests in history, palaeontology, archaeology and language, and a lifetime fascination with bones. The thoughts and emotions expressed by Hope's poem and the different layers and sub-text that the bone and engraving embodied have fuelled the research in this project.

Skeletal remains can also be considered as metaphors for language and narrative, in that they are not only storehouses of information, but in the semiotic sense, bones are signs. The meanings or interpretations are determined by the position,

² Charles Darwin in Kathy E. Goldberg, *The Skeleton: Fantastic Framework*, U.S. News Books, Washington D.C, 1982, p 103

experience and cultural background of the reader/interpreter. Specific languages (e.g. medical, scientific), used to describe and interpret bones can reshape the perception of their physical sense, thereby influencing the manner in which the viewer perceives and relates to them.

The five chapters of this exegesis detail my journey of investigation and exploration using the core medium of photographic/digital imagery supported by theoretical research. I draw analogies between bones and language, using photographic imagery to visually express these concepts and demonstrate their similarities as complex, many-layered communication systems that urge the articulation of a variety of narratives.

Chapter One deals with language and narrative, and explores the concept of bones as communication systems. In Chapter Two I discuss the historical context of bones, examining how a language has evolved through the development of scientific knowledge gleaned from and interpreted through the evolutionary, archaeological, anthropological and historical records based on the examination of skeletal remains. In Chapter Three I examine the language of bones as evidenced by their use in cultural contexts and practices, including the Palaeolithic era (defining Palaeolithic art as a cultural rather than an arts practice), the Mexican Day of the Dead Festival and the Sedlec Ossuary in the church at Kutna Hora, Czechoslovakia. While bones are significant objects in these cultures, the languages evoked by them are very different, articulated and shaped by the manner in which bones are used as vehicles to express specific concepts.

Chapter Four explores the language evinced through bones as art forms, and examines arts practices and practitioners that have informed my image making. Not all the artists I have referenced necessarily use or refer to bones as part of their arts practice, but it is their techniques and interpretation of object forms that are relevant to my work. Henry Moore's sculptural forms for instance, epitomise the essence of bone stripped of its flesh and revealed in its purest sense as the embodiment of form, and conversely while H. R. Giger's architectural and futuristic forms also emphasise the structural nature of the skeleton, his work, particularly his skeletal forms foreshadow a future of constructed, inorganic body

parts. Zdzislaw Beksinski's paintings depict bone forms as purely organic elements, in portrayals of an apocalyptic world where familiar systems seem to be breaking down, with bony forms encroaching on buildings, forming trees and extruding from the human body.

Christian Boltanski's technique of collating and categorising objects and photographs demonstrates how languages can be evoked and influenced by the contextual relationships of objects with one another. Patrick Hall's and Doris Salcedo's installations also reference the collecting and collating of objects in set 'frames.' Hall's cabinet of bones and Salcedo's insertion of objects into furniture pieces enfold the objects, therefore setting their narratives into specific frames.

Photographer J. John Priola's depiction of objects in *Once Removed: Portraits*³ informs the manner in which I have portrayed the objects (bones) in my images. Priola's technique of disassociating his objects from a contextual background invests them with a singularity that invites the viewer to respond to them on a spontaneous and intuitive level. Conversely, 16th century anatomist Vesalius' exquisitely detailed and rendered anatomical woodcuts place his human forms in landscapes that seem to indicate a defined geographical place and space. This technique invests these forms with a sense of identity and individuality that is otherwise lost – or depersonalised – when they are placed or viewed in isolation. Photographer Harry Nankin's photogram (or shadowgram) images evidence the object or organism as traces, which support my concept of bones and photographs as traces of physical realities. Photographer Stephanie Valentin also uses photograms and photography to explore the natural world, in particular the world of micro-organisms as artefacts. Her work is an exploration of the interconnectedness of all life forms and the diversity of the natural systems, a concept that I found emerging through my visual explorations of bones.

Chapter Five details the development of my own language through image making through the medium of photography. I see photographs as being indicators of an absent presence – as bones are. I consider that photographic imagery (both

³ Andy Grundberg & Rebecca Solnit. *Once Removed: Portraits By J. John Priola*, Arena Editions, Santa Fe, New Mexico, 1998

analogue and digital) and bones are memory tokens, symbolic evidence of once physical presences. To hold or view a bone or photograph is to contemplate the existence of someone or something; they are the signifiers of existence. Bones and photographs also represent identity; in the case of photographs, a person, place or time. Bones can also identify the type or species of a once living organism, and since the advent of carbon dating and DNA testing, can place a specific individual in a particular era or period of time.

Through the course of my research I have come to consider photographs and skeletal remains as interrelated concepts. ‘Exposure’, ‘revealing,’ and ‘time’ relate to both. As photographs are exposed in the darkroom, so are bones exposed in the geological/archaeological layers, both revealing information. However, both are subject to decay. A photograph fades, the information becoming blurred and indistinct, as bones over time lose their information as they crumble to dust. They are both also indicators of absence, a reminder of what has been lost. I hear this sense of loss echoed in the poignant last line of Hope’s poem – ‘what bone shall speak for me’? I see this as a cry for remembrance after death; that something will remain as evidence of a life lived and experienced by an individual personality. Photographs are proof of a past existence, as are bones, and Cadava’s statement: ‘what survives in a photograph is also the survival of the dead’⁴ is just as applicable to skeletal remains. As such I feel that photography is an ideal medium with which to explore my project. While the idea of the ‘truth’ of photographic imagery has been a consistent theme since the development of photography, it is however a moving target. It has always been possible to manipulate and adapt photographs to depict any chosen version of a ‘truth.’ In contemporary arts practice although still drawing on traditional practices, photography is used to explore, reinterpret and redefine the perceptions of culture, identity, place and space. Photography is a malleable, plastic medium that offers restructured versions of selected ‘realities,’ and as such this is why I feel that it is a particularly appropriate medium with which to explore the language of bones –

⁴ Eduardo Cadava. *Words of Light: Theses on the Photography of History*, Princeton University Press, Princeton, New Jersey, 1997, p 8

as a medium it is as malleable and mutable as are the interpretations applied to bones.

Photographs create a distance (both physically and in time) from the subject while also allowing the opportunity for close examination of the subject. The act of photographing bones and transferring them into the world of art removes them in both time and space from their origins (whether this is the body or their 'found' location), thus altering the sensibility associated with bones. As an image the viewer can examine them from an objective standpoint, at one remove from the 'rawness' of the bones' natural state. This changes the associated narratives; the language associated with the raw bone will be different from that associated with an image of a bone. Photographs and bones both constitute a visual trace of a form of reality. In the case of photographs it is often the artist/ maker's construction of a particular type of reality. Regarding bones, it is the language that defines and describes them that creates their reality, and this can be as much of a 'construction' as that of the artist/maker.

Some of my images are consciously constructed, but others seemingly evolved and formed their own language without conscious intent on my part, although the final decision of what was retained and what was discarded was always my own.

My investigation has been a process of peeling back the layers of meaning and interpretation applied to bones, removing each metaphorical skin attempting to get to the heart or core of the matter. Through the camera lens and the scanner bed, I have come to discern a natural order that uses and reuses successful structures, repeating patterns that are echoed from the microscopic to the cosmic levels. While this may be the rudimentary language of bones, the languages used to describe them will always influence how they are shaped and perceived in the consciousness of the viewer.

The outcome of my project is realised in an exhibition consisting of three components – wall mounted images, a book of images and a shelf installation of bones with associated objects. These in themselves comprise three languages and relate to the three models of cultural and ritual practices studied in the exegesis.

The wall mounted images of bones evoke the language of the art object through the sculptural forms of the bones. The images also demonstrate how visual manipulation of bones influences their resulting associated language, as seen in the physical alterations of the engraved and shaped Palaeolithic bone objects. The Day of the Dead Festival in Mexico also features manipulated skeletal forms - sweets shaped like skulls, skeletal forms dressed as musicians or formed into jewellery and ornaments.

The book of images and the bones displayed on the shelf installation evidence bones as specimens or memory tokens. The shelf installation can almost be read like a book, a narrative flow being created through the overlapping format of the shelves, one layer leading to the next, and through the relationships of the objects to one another. This invites a contemplative approach, as do the images in the book. The book invites the viewer to embark on a journey through the images, building their own narrative story in response to them. Both the book and the shelf installation relate to the bone display in the Sedlec Ossuary, which also induces a contemplative study of the objects. These concepts will be discussed in greater depth in the body of the exegesis.

Chapter One

Words Scored Upon a Bone.

Bones, Photographs and Language as Communication Systems.

Bones and language can be regarded as interrelated, structured, codified systems that contain information that can be expressed through the forms of narrative and speech. I consider photographs, bones and language to be traces that evidence different concepts of reality, all carrying information that is inherent to them or imposed upon them.

For the purpose of this project, I define language as a construct of words specific to a people or culture, which when articulated according to certain grammatical rules, expresses and communicates ideas and information. Narrative is the social extension of language that is concerned with communicating stories, events and situations.

Bones are remnants carrying information that can be expressed using a variety of languages: those of science, medicine and the science – based disciplines of archaeology, anthropology and palaeoanthropology – all of which rely on written or verbal language to articulate their narratives. Photographs can also be considered as remnants, with their associated narratives an integral part of them. To further extend these correlations while bones are considered as indicators of death, languages are considered to be living or dead; and, regarding photographs, as Barthes stated echoing Cadava ‘... that rather terrible thing which is there in every photograph: the return of the dead.’⁵

Bones are organised systems containing a wealth of information about the organisms they are specific to. There are also the anecdotal narratives that have grown up around bones, which often form the basis of myth and origin stories that evolved and came to be expressed through religious, cultural and ritual practices. Therefore, in this context bones can be seen metaphorically as palimpsests – a palimpsest being an animal skin, usually calf – that has been prepared for use as a

⁵ Roland Barthes. *Camera Lucida. Reflections on Photography*, Vintage, Random House, London, 2000, p 9

writing surface. Scraping away the text enabled these skins to be written over repeatedly, therefore acquiring layer upon layer of different stories and information. Often, vestigial traces remained to be overlaid again by different text, so that layers of ideas, information and knowledge were built up over time, both in the physical sense and a theoretical sense.

I have also referred to the philosophy of semiology – the system of signs – to demonstrate the parallel between bones and language as interrelated systems that through a format of signs, their organisation and the context in which they appear impart certain information. They can be considered as messaging systems or imprinters. Eco defines imprinters as ‘evidence of what once existed,’⁶ traces of previous forms, as are bones and photographs. Seboek extends these correlations, citing Cairns-Smith: ‘Messages are obviously the most important inheritance, since only they can persist over the vast reaches of time.’⁷ Bones certainly survive over vast periods; photographs less so, but both impart a silent record of the past in the form of signs that are elucidated and expressed through language. However, the meanings conveyed by words and the way in which they are expressed can be ambiguous. Language is a fluid medium strongly dependent on the context in which words are used and therefore how meaning is imparted. To paraphrase Rayner: words are conveyances of intention rather than having a literal meaning in themselves – in a sense all words are metaphors.⁸ This is just as relevant concerning bones; the manner in which they are perceived being wholly dependant on the (often metaphorical) language applied to them. As with language signs, bones are subject to specific structural rules – grammatical or anatomical – that must be understood to be able to be read correctly. The following example, written by a computer at Brazosport College, Texas, demonstrates how language is used to tell a story, but unless the rules are understood and structured correctly, it will not make sense, at least not in a conventional way:

⁶ Umberto Eco. *Semiotics and the Philosophy of Language*, The MacMillan Press Ltd, London, 1984, p 15

⁷ Thomas A Seboek. *A Sign is Just a Sign*, Indiana University Press, Indiana, 1991, p 85

⁸ <http://www.bath.ac.uk/~bssadm/inclusional/complimentaryvision> *Complimentary Visions*, Alan Raynor, (13 June 2006)

Tex Doe, the marshal of Harry City, rode into town. He sat hungrily in the saddle, ready for trouble. He knew that his sexy enemy, Alphonse the Kid, was in town. The Kid was in love with Tex's horse, Marion. Suddenly, the Kid came out of the Upended Nugget Saloon.

'Draw, Tex' he yelled madly.

Tex reached for his girl, but before he could get it out of his car the Kid fired, hitting Tex in the elephant and the tundra.

As Tex fell he pulled out his own chessboard and shot the Kid 35 times in the king.

The Kid dropped in a pool of whisky. 'Aha!' Tex said. 'I hated to do it but he was on the wrong side of the queen.'⁹

The same can be said of reading archaeological finds – the signs have to be read according to specific criteria and rules based on an educated and pragmatic approach. Bryson exemplifies this when quoting Walker and Shipman: 'If you correlate tool discovery with the species of creature most often found nearby, you would have to conclude that early hand tools were mostly made by antelopes.'¹⁰ These examples evoke a rather surreal imagery, but demonstrate how language can be flexed to affect the shape and meaning of the concepts expressed. In the same manner the flexing (positioning) of skeletal remains in an archaeological context also influences the language used to interpret and describe them. This will subsequently affect the narrative information disseminated regarding them. To understand these signs the reader has to have knowledge of the symbology used and the related contexts to interpret and translate the information – for example, the alphabet in the case of languages and the physical structure, trace evidences and relationship to associated objects in the case of bones. Photographs are also dependent on their subject matter, their relationship to the space, place and contexts as to how they are read and understood.

These elements (language, bones and photographs) all connect social and cultural groups. All can be considered as memory traces that leave a record of the history and movement of populations through time and space. Skeletal remains evidence evolutionary development and trace the earliest migrations of humankind out of

⁹ Article in the *New York Herald Tribune*, 10 March 1979. Cited in Roy Harris, *The Language Myth*, Gerald Duckworth and Co. Ltd, London, 1981, p 112

¹⁰ Bill Bryson. *A Short History of Nearly Everything*, Transworld Publishers, London, 2003, p 550

Africa. Word remnants from original language rootstocks follow the later movements of human populations through geographical space, as commented on by Sapir, who wrote:

Just as similar social, economic, and religious institutions have grown up in different parts of the world from distinct historical antecedents, so also languages, travelling along different roads, have tended to converge toward similar forms. Moreover, the historical study of language has proven to us beyond all doubt that a language changes not only gradually but also consistently; that it moves unconsciously from one type towards another, and that analogous trends are observable in remote quarters of the globe. From this it follows that broadly similar morphologies must have been reached by unrelated languages, independently and frequently.¹¹

A more immediate, personal response regarding this concept was expressed by Doug, a friend of Cook Island/Scottish descent, born and raised in New Zealand. He commented that he saw the structure of language as the bones of the language of each race or culture – as communicators that hold together the stories of the different peoples. He stated: ‘through the spirit and the birth parent, I know this is right. I see the bone structure of the language through the similarities of the stories of the people that connects them racially and culturally.’¹²

I feel this statement in particular epitomises the essence of the interrelationship and connectedness of bones and language – the ties that bind related peoples, genetically and through the telling of their stories.

As a skeleton is structured according to specific criteria, writing also gives language a physical structure. Ideas and information are set in bounded entities that are not as subject to change and spontaneous reinterpretation as are the more fluid characteristics of the spoken word. Writing also validates something – ‘until something’s written down it doesn’t really exist,’¹³ and is considered irrefragable, as exemplified by Omar Khayyam:

¹¹ <http://www.bartleby.com/186/pages/page129.htm> Edward Sapir. *Language: An Introduction to the Study of Speech*, 1921, (15 May, 2005)

¹² Douglas James Brown. (personal comment 24 April 2005)

¹³ *The Young Poisoner’s Handbook*. 1995, ABCTV, 6 June 2005.

¹⁴ <http://www.phrases.org.uk/meanings/365850.html> Omar Khayyam (28 June 2005)

The Moving Finger writes; and, having writ,
 Moves on: nor all your Piety nor Wit
 Shall lure it back to cancel half a Line,
 Nor all your Tears wash out a Word of it.¹⁴

Written language evolved as art forms in the symbology of pictographs, hieroglyphics and ideographs¹⁵ (Fig 2). However, while hieroglyphics continued their evolution into a purely abstracted symbolism, Chinese symbols have remained essentially as pictographs, although they have become abstracted and simplified over the last 5,000 years.¹⁶

Pictographs

女	子	口	日	月	山	川	豕	目	心	雨	田	木	龜
woman	child	mouth	sun	moon	mountain	river	pig	eye	heart	rain	field	tree	turtle

Ideographs

一	二	三	上	下	中	力	凸	凹
one	two	three	above	below	middle	stength (plough)	convex	concave

Fig 2

Ideographs - graphical representations of abstract ideas.

A comparison can be drawn between the evolution of bones and language. The image of Egyptian hieroglyphics (Fig 3) depicts the transition, or evolution of image to alphabet. In a similar manner the physical evolution of vertebrates can be traced through examination of the DNA (information bundles) contained in the bones. As visual languages in the form of art and writing connect specific cultural and ethnic groups, so too do bones describe, in the form of tools and art forms, specific cultural connections. Bones can also describe, in a similar specificity to ancient texts, historical lifestyle practices as diverse as cultural traditions, nutritional standards and physical health and development.

¹⁵ <http://www.chinavista.com/experience/hanzi/hanzi.html#1> Du Feibao. *Origin of the Chinese Script*. (28 June 2005)

¹⁶ <http://www.omniglot.com/writing/chinese.htm> Omniglot. *Writing systems and languages of the world*. (28 June 2005)

glyph	translit.	phonetic	glyph	translit.	phonetic
	3	[ʔ]		h	[h]
	ʔ	[ʔ]		h	[x]
	γ	[y]		h	[c]
	ʿ	[ʔ]		s	[s]
	w	[w]		s	[š]
	b	[b]		h	[q]
	p	[p]		h	[k]
	f	[f]		g	[g]
	m	[m]		ʔ	[ʔ]
	n	[n]		ʔ	[ʔʰ], [c]
	r	[r]		d	[d]
	h	[h]		d	[dʰ], [i]

Fig 3
Egyptian hieroglyphics. From picture to symbol

However, these systems (bones, art and language) are only indicators of meaning that are disseminated through the filters of different cultures, social practices and beliefs. Therefore they evolve and are expressed in different ways, even within the same cultures the meaning, interpretation and expression of traditional concepts will vary. (For instance, while my parents accepted my fascination with bones and didn't mind me collecting them, my friends and their parents thought I was rather strange!)

Bones will accumulate subsequent layers of language when they are used or transformed into art or utilitarian forms. These objects are imbued with the trace memories of a culture's history and traditions, providing a record that can be read by subsequent generations. Again, this language is influenced by the contexts in which the relics are situated, the style or form they take, the implied intentions of the artist, and the response of the viewer. Adding a deeper layer of meaning and underlying the outward visual form of the work will always be the silently implied subtext of the maker's voice.

The engraved bone that inspired Hope's poem is an exemplar for the complexity, diversity and interconnectedness evidenced by languages and bones. This bone

not only has a voice in a literal sense through the engraved message, but also expresses the emotions of the maker at that particular instance in time. With the bone, the language/narrative has survived, as Hope states: 'a thousand years have flown/before that ink is dry.' In a sense the ink will never dry, because this is an unfinished story. (The reader has to wonder at the outcome of the story – was Erland actually murdered?)

Scientific examination of the bone's DNA would allow it to speak about its evolutionary history, that having once been a part of a living organism it contains its own, albeit silent language. In the case of human remains, bones will often reveal occupation, physical appearance, the types of diseases suffered and medical skills pertinent to a particular time or culture. They can also evidence the manner of death and through burial practices, the cultural and social practices and beliefs of the group or society associated with them. These are the associated narratives that are expressed according to their specific disciplines. However, the languages associated with human remnants can often be highly personal, coloured and influenced by the attendant cultural, experiential and emotional perceptions. Bones associated with other relics (organic or manufactured) will voice a different narrative, which again demonstrates the mutability of their language.

Although language, perhaps more so in the era before instant mass communication, was specific to the geographical area and social or cultural group, it differs very little in its narrative structure from one culture to another. Prince cites as an example the similarities between Native American and Russian folk tales, demonstrating 'that everybody has the same intuitions or has internalised the same set of rules about the nature of narrative.'¹⁷ Certain words are also shared cross-culturally, such as 'mama' or 'mummy.'¹⁸ In this sense, language has an analogy with physical evolution, where a similarity of skeletal structure is demonstrated throughout all vertebrate species, the same basic design being repeated again and again, with only minor adaptations and variations specific to each species' needs. Just as skeletal forms all serve a similar purpose – as a

¹⁷ Gerald Prince. *Narratology. The Form and Functioning of Narrative*, Mouton Publishers, Berlin, 1982, p 80

¹⁸ <http://www.newscientist.com/article.ns?id=dn6188> Anna Gosline. 'Family words came first for early humans.' 26 July 2004, Exclusive from *New Scientist* Print Edition. (14 May 2005)

structure, a form of nourishment for the body as a whole and a carrier/communicator of genetic information – so too does language. Language is structured, and is able to communicate and pass on information, provides nourishment for the psyche in the form of conversation and social connections, and through narrative consolidates and perpetuates the identities of social groups and cultures with the telling of their origin stories. Language, narrative and ritual practice connect cultural groups through a system of often subtle signs, which are indicators of belonging. These signs are often not obvious or understood by outsiders. Solomon states: ‘culture itself is a tissue of codes, a complex system of signs whose meanings may not always lie on the surface.’¹⁹ This is just as relevant concerning bones, which silently connect cultural and ethnic groups through evidence of inherited structural similarities and the chemical content of the bones that indicates where an individual has lived. These familial messages lie tacitly beneath the surface of the bone as signs of belonging, connecting people to a particular group, culture or geographical location.

Bones are also used in speech symbolically and as metaphors to express powerful concepts that are implicitly understood inter-culturally: “close to the bone,” “I feel it in my bones,” “chilled to the bone,” “bone idle” – and in a more sinister sense – “pointing the bone.” This was, and from the following example obviously still is, a form of ill – wishing, and so powerful was this ritually and culturally, that in the past it often led to actual death. This particular form of ill – wishing is culturally specific – it has to be believed before it can have any effect. (Prime Minister John Howard was on the receiving end of this custom during a protest by Aboriginal people about the abolition of ATSIC in April 2004 (Fig 4).²⁰

¹⁹ Jack Solomon. *The Signs of Our Times. Semiotics: The Hidden Messages of Environments, Objects and Cultural Images*, Jeremy P. Tarcher, Los Angeles, 1988, p 2

²⁰ Aboriginal and Torres Strait Islander Commission. *Examiner Newspaper*, 22 April 2004.



Fig 4
Moopar pointing the bone at John Howard.

This example demonstrates the power of language combined with a focus object (bone) and intent to create a desired reality. These unite to impose shape and form, to invoke a type of physicality that validates the object, idea or belief system. In a similar manner, once something is described and is brought into public consciousness by being voiced, it achieves a valid and powerful reality. Therefore, the naming and describing of bones, particularly in the scientific record, gives them validity in fact and sets them into specific frames of identity – e.g. as medical, scientific, archaeological, cultural, or as art objects. This sets the remnant forever into a specific parameter, imposing a metaphorical physicality by the naming of the object (as well as its real physicality of bone) that validates its existence as a significant object.

Photographs are also set into specific frames by being named or described or by the narratives associated with them. Since the 19th century they have been used to document events, becoming the social and historical narratives of the times. They are therefore as culturally specific as bones and language. The language used to describe them, depending on whether the narrative is personal or cultural, art-related, technical or scientific, will define the manner in which the photograph is perceived. Unnamed or undescribed images and bones are unstructured and ambiguous. They require the language of naming and describing to give them a

shape, form and validity. Cassirer states that ‘the name does not merely denote but actually is the essence of the object, that the potency of the real thing is contained in the name.’²¹ The power of naming is such that to speak a name invokes the person or object, and ensures that as long as the name is spoken, the person/object is active and present. The word gives form to the thought, shaping the subject/object (or image) according to the words or language applied to it.

This applies particularly in relation to new palaeontologic discoveries, where until a newfound bone or fossil is described and named and has been accepted by the scientific community, as such it is not considered a valid specimen. It is this naming and describing – the language – that overlays the bone that creates another narrative and shapes the bone (in a metaphorical sense), in essence imbuing it with a specific reality.

Therefore, although bones obviously already have physical shape and form, the language applied to them shapes them anew in the consciousness of the viewer, in that the perception of them is altered and they acquire a new depth of layers of shading and meaning. The manner in which a bone has been altered (engraved, decorated or shaped), will also affect the language associated with it, in that it acquires an added patina of language invoked by the alteration and story behind it. The action of observation on the part of the viewer will also alter the perceived reality of the object. This has a reference to a dictum of modern physics, which I feel is just as applicable in this context, in that the act of observation changes the object being observed.²² The acts of observing, naming and describing all influence the manner in which the forms of the object, whether bones or art works, are understood. Herein a dichotomy can arise between the visual perception (shape, form), and the intellectual interpretation (knowledge, cultural attitudes). This influences the language applied to the object/image, which in turn is affected by the environments in which they are found/placed.

²¹ Ernst Cassirer. *Language and Myth*, Constable and Co. London, 1946, p 3

²² <http://www.aip.org/history/heisenberger/p8.htm> Erwin Heisenberger. *Quantum Mechanics, 1925-1927, The Uncertainty Principle*, (17 July 2005)

In the following chapter I discuss the language of bones as demonstrated by their historical contexts and how they are described through scientific research and investigation. Barfield's statement: 'language reveals the evolution of human consciousness,'²³ also applies to the examination and interpretation of human remains. Evidence of art forms, tools and weapons associated with burial practices indicates a belief in an afterlife, demonstrating an awareness of self beyond the here and now. This is the yardstick that defines the separation between human and animal and is an indicator of the emergence of consciousness and evolutionary and cultural progress.

²³ Owen Barfield. *History in English Words*, Lindisfarne Books, Eerdmans, Grand Rapids, Michigan, 1967, p 18

Chapter Two.

Now in Another Age.

Seeking the Language of Bones Through an Historical Perspective.

All current Western knowledge of the evolutionary history of vertebrates has been sourced from the discovery and interpretation of skeletal remains in the fossil and archaeological records. Charles Darwin's examination and interpretation of rocks and fossils enabled him to estimate the age of the earth, his premise for the theory of evolution being established partly on the basis of this research.²⁴ On an anecdotal level bones have also fuelled and enriched the narrative stories of myth and legend. For example, it is interesting to speculate that perhaps the discovery of dinosaur remains instigated the stories of monsters, giants and dragons.

While bones will always be seen as the enduring symbols of death and decay, they are nonetheless the fourth most active, living element of the body, after the heart, liver and lungs. It is this vital aspect of living bone that is the reason it becomes the repository of the organism's experiential history. This is etched into the bone in the womb or egg and continues over the organism's life span, surviving after death. The primary language of DNA endures in the collagen and calcium deposits in the bone, the advances in DNA research creating new languages that extend and enrich the knowledge of vertebrate evolution. Bones thus become information systems delineating the organism's life history, and technological, social and cultural practices. Goldberg writes: 'bones transcend death, marking the path humankind has travelled over time.'²⁵ This concept is demonstrated by the work of researchers such as Bryan Sykes who have used mitochondrial DNA, passed down only through the female line, to trace modern Europeans in an unbroken genetic line back to the remote past to one of only seven women. Although this theory is open to dispute, research reported by the journal *Nature* in late 2000 described a Swedish study of the mitochondrial DNA

²⁴ Bill Bryson. *A Short History of Nearly Everything*, p 97

²⁵ Goldberg, p 7

of 53 people.²⁶ This research suggested that all modern humans emerged from Africa within the last 100,000 years and originated from a rootstock of no more than 10,000 individuals.²⁷ This is why there is so little genetic diversity in modern humans, and therefore no such thing as ‘race.’ The differences in human appearance have evolved over millennia and are merely a response to prevailing environmental conditions.²⁸

The separation of humans from the ape family is evidenced by bipedalism, demonstrated by the manner in which the spine is articulated in its connection to the base of the skull, and in the positioning of the pelvis. Even an abstract concept, such as the development of language is demonstrated through the making of brain endocasts, which evidence the growth and development of the brain. In the case of *Homo erectus*, this demonstrates the formation of the Broca’s area of the frontal lobe of brain that is associated with speech.²⁹ Another indicator of speech is the hyoid bone, a small U-shaped bone located above the larynx, anchoring the muscles of the tongue. The five muscles associated with it are necessary to assist in the complicated movements of the tongue to produce vocal sounds. In animals, this results in the vocalisations particular to the species and in humans, speech. It is also the only bone in the body that does not touch any other bone, and when the tissue around it disappears, the hyoid drops away and can be lost completely, in effect, silenced.³⁰ Conversely, the hyoid bone can speak through forensic science – a crushed or broken hyoid bone can indicate death by manual strangulation. (The hyoid bone also has a voice as a Palaeolithic art form: see Chapter Three, pp 43, 44).

The facility for speech is particularly pertinent regarding human social and cultural development, and all that is implied by the ability to communicate

²⁶ Bryson, *A Short History of Nearly Everything*, p 577

²⁷ Bryson, *A Short History of Nearly Everything*, p 577

²⁸ Bryson, *A Short History of Nearly Everything*, p 362

²⁹ Donald Johanson and Blake Edgar. *From Lucy to Language*, George Weidenfeld and Nicolson, Ltd, London, 1996, p 106

³⁰ Stephen Booth. *The Dead Place*, HarperCollins Publishers, London, 2005, p 38

vocally. This is especially relevant regarding the perceptions of Neandertal social and cultural evolution. Previously Neandertals were considered incapable of articulating speech – type sounds because of a highly placed larynx and vocal tract that was more apelike than human.³¹ However, the discovery of a Neandertal hyoid bone that was essentially modern in shape, as opposed to a chimpanzee hyoid, indicated that Neandertals shared with modern humans the capacity for speech. This somewhat alters the perception of Neandertals as being more apelike (animal) than human; the capacity for speech defining above all else exactly what constitutes the being-ness of human.

Bones can also indicate conditions as intangible as social awareness and lifestyle changes. Remnants of *Homo erectus* remains from Lake Turkana, Ethiopia, dating from 1.7 million years ago indicated a change from a vegetarian diet to that of meat eating. This was demonstrated by the condition of the bones of a female that were deformed and covered in coarse growths, the result of a condition called hypervitaminosis A, which can only come from eating the livers of carnivores. The fact that she apparently lived for some weeks or months with this debilitating condition indicate that her people cared for her,³² which by extension, evidences a trait as intangible as altruism, one of the attributes that definitively separate what is defined as human and animal.

Burial practices also provide important and often poignant evidence of people's lives. They also confer to the remains a sense of identity and individuality, and perhaps more significantly, indicate a belief in an afterlife. From earliest times people have been buried with objects such as food, weapons, tools and personal ornaments. The narratives that arise from these burials are complex and rich in the details they provide of cultural and ritual practices. They also act to bring the individual into the present by imparting a sense of immediacy to the remains. The earliest known example of this was a burial at Shanidar in north-eastern Iraq of an aged, crippled Neandertal man. Excavation of his grave revealed the presence of

³¹ Johanson and Edgar, p 107

³² Bryson, *A Short History of Nearly Everything*, p 562

pollens from a range of wildflowers, some with medicinal properties. It was suggested that the pollen could have blown over his body, but there is the implication, and it is tempting to believe so, that this was a deliberate burial with flowers provided for the deceased. The physical condition of the man, who had lost an arm during childhood and suffered from severe arthritis, also indicates that others had cared for him during his lifetime.³³ Johanson states that ‘feelings don’t fossilize,’³⁴ but it is possible, through the language associated with this burial, to construct a narrative that indicates that this was an individual who was buried with sorrow and compassion. This concept is at odds with the now outdated but still often prevalent idea of Neandertals as primitive, brutish creatures. This perception of the Neandertal had its origins in the misinterpretation of the language of the original Neandertal skeleton discovered in the Neander Valley in Germany, in 1856. This particular individual suffered from severe arthritis (a common complaint in early hunter/gatherer societies), and a neck injury. Originally his deformed bones were considered normal for his species, and consequently for many years Neandertals were depicted as primeval and apelike, as Bryson states: ‘the quintessential cave man.’³⁵

A sense of empathy is engendered by the example of the burial of a woman in Denmark, who died in childbirth in approximately 9,000 BCE and who was buried with her baby laid beside her on a swan’s wing.³⁶ This example cannot help but create an impression in the mind’s eye, of this woman and her child, newly dead with their grieving relatives in attendance, being laid to rest; the fresh swan’s wing, still feathered, being laid down as a soft bed for the baby. These examples demonstrate how the language of remnants can be enriched by the contexts in which they were placed, throwing a new light on a people that are still often considered to be ‘primitive.’ They provide a poignant insight into the lives of these people as individuals, in an incredibly immediate, intimate way.

³³ Johanson and Edgar, p 100.

³⁴ Johanson and Edgar, p 107

³⁵ Bryson, *A Short History of Nearly Everything*, p 573

³⁶ *Stories From the Stone Age*, ABCTV, 26 January 2005

Human skeletal remnants also evidence changes in lifestyle. The development of agriculture 10,000 years ago was a major milestone for humankind, in that it laid the foundation for civilisation and the development, among other arts, of writing. Larsen describes agricultural development as important in human evolutionary history as bipedalism and speech.³⁷ This major shift in lifestyle is reflected by the changes in the skeletal structures of farmers compared to those of the early hunter/gatherers. The bone remnants of hunter/gatherer peoples show great robustness allied with a prevalence of osteoarthritis, both conditions indicative of great physical mobility and activity. There were few bone lesions indicating infection, dental caries were rare and overall health was generally good. The shift to farming resulted over time in a decline in general health, probably as a result of living in crowded conditions with poor sanitation, resulting in a rise of infectious disease. Poorer nutrition, due to the reduction in the range of food types eaten, resulted in height reduction and physical stress. The shape of the skull also changed, becoming shorter and rounder as a result of eating softer, processed foods,³⁸ with a concurrent loss of bone density in the jaw where the teeth are seated. While the development of agriculture was of great benefit for humankind it has also proved a double-edged sword. It is only since the 20th century that humankind has regained the general health and robustness of the hunter/gather,³⁹ (with the help of modern medicine), but this improvement is offset by a more sedentary lifestyle and the consumption of highly processed 'fast' foods. All these changes and resultant conditions, along with disease and infections, are indicated in the bones and overall skeletal structure.

Other medical conditions evidenced in the bones are decalcification due to lack of vitamin D, which causes rickets, indicated by stunted growth and deformed bones. Scurvy and syphilis cause lesions on bone, the thickening of the skull bones can indicate anaemia, pitting and scarring of the pelvis evidences

³⁷ Clark Spenser Larsen. *Skeletons in Our Closet*, Princeton University Press, Princeton, New Jersey, 2000, p 8

³⁸ Larsen, pp 228, 229.

³⁹ <http://www.beyondveg.com/billings-t/comp-anat/comp-anat-8b.shtml> Loren Cordain 'Paleolithic Diet (Paleodiet) and Paleolithic Nutrition articles.' (25 September 2005)

childbirth, and porous bone growths in the eye socket can signify iron deficiency. As can be seen by these examples, the narrative of humankind's physical development and general health is clearly articulated in the bones. However it is also possible to trace the advances in stone tool and subsequent weapon technology, and even different fighting styles, by the injuries inflicted on the skeleton. In Neolithic times, for example, injuries to the skull were common, indicating the use of stone weapons. In earlier times animals more often caused injuries that were severe enough to mark the bone. These injuries tended to be to the extremities, perhaps suggesting defensive or warding off gestures. Fractures of the ulna were also common cross-culturally throughout history. These are typical of a 'warding off' blow, known as a parry fracture of the ulna⁴⁰ (Fig 5).



Fig 5

Parry fracture of the ulna.

This injury was more common to women and people of the lower social strata, such as serfs, evidencing perhaps the social/cultural attitudes of the time.

The advent of the Iron Age was marked by the appearance of oblong fractures in the frontal region of the skull (Fig 6), caused by axe and sword blows, and different types of injuries reflected different fighting styles and techniques.⁴¹

⁴⁰ Goldberg, p 101

⁴¹ Goldberg, p 101

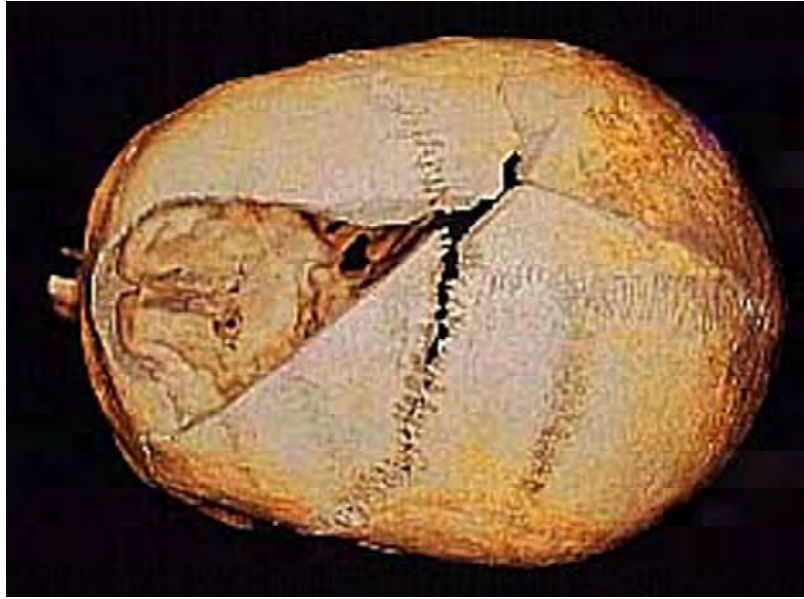


Fig 6
Weapon cut to the skull – Young female.
Late Saxon or medieval period. Suffolk, England.

Skeletal remains are often the only remaining evidence of humans' first efforts at healing. Skull trepanation was often performed successfully from as early as the end of the Neolithic period, as indicated by some skulls showing evidence of post-operative healing at the operation site ⁴² (Fig 7).



Fig 7
Human skull showing evidence of trepanation. Peru

⁴² Paul A. Janssens, *Palaeopathology. Diseases and injuries of Prehistoric Man*, John Baker (Publishers) Ltd. London, 1970, p 126

Perhaps one of the more apposite examples of the fusion of bones and language is provided by Egil's saga, in which the narrative of the saga supports the language borne in the bones.⁴³ Briefly, Egil Skallagrimsson (910 - 990 AD) was a Viking poet whose bone deformities and symptoms were only known from the descriptions in the saga. As Weinstein stated, by "excavating words" researchers concluded that Egil suffered from Paget's disease, an enlargement, thickening and hardening of the skull and other physical deformities. In Egil's case this was probably caused by high fluoride levels in the soil, water and food, one of the environmental sources being volcanic ash, which is particularly endemic to Iceland. Egil, in one of his poems referred to 'my rock-helm of a head' (Fig 8).



Fig 8
Skull showing evidence of Paget's disease.

⁴³ <http://www.sciencedirect.com> Philip Weinstein. *Palaeopathology by Proxy: 'The Case of Egil's Bones'*, *Journal of Archaeological Science*, Vol. 32, Issue 7, July 2005, pp 1077 – 1082 (30 May 2005)

Dying in Iceland, he was given a pagan burial, his bones being re-interred some ten years later at a church in Mosfell, south western Iceland, and removed again about 150 years later when a new church was built.

It is from the following description that Paget's disease is supposed:

The skull was an exceptionally large one and its weight was even more remarkable. It was ridged all over and Skapti (a priest), wanted to find out just how thick it was, so he picked up a heavy axe, swung it in one hand and struck as hard as he was able with the reverse side of the axe, trying to break the skull --- but the skull neither broke or dented on impact---⁴⁴

Weinstein concludes: 'this case illustrates the potential value of interpreting historical narrative as a supplement to archaeological and palaeopathological investigation.'⁴⁵ This case is a fitting example of not only how the language expressed by bone has shaped the narrative of the saga, but also the saga confirming the story of the disease as evidenced in the bone.

The language of bones becomes yet richer and more complex when bones are etched or shaped in any way, and other languages are evoked when they are associated with religious, ritual or cultural traditions. The Oracle or Dragon bones (Fig 9) of the Shang Dynasty of China (approximately 3,500 years ago) were used to divine the future by interpreting the cracks in heated bones (prosaically these bones were often cattle shoulder blades).⁴⁶ This language was wholly dependent on the interpretation of the seer or reader, which could change from person to person, and possibly on what the questioner wanted or expected to hear. As fixed language systems, the earliest forms of Chinese writing were found on animal bones and turtle shells, excavated in Henan province, dating from 3,300 years ago. These recorded historical and important events such as wars, crop harvests and rainfall, providing accounts of the royal household, giving valuable insights into the cultural and social practices and conditions of the time.⁴⁷

⁴⁴ www.rcpe.ac.uk/publications/articles/journal_34_3/R_Viking.pdf W. W Buchanan. *Did the 10th C. Viking Egil Skallagrimsson (c. AD 910 – 990) Have Paget's Disease?* (30 May 2005)

⁴⁵ <http://www.sciencedirect.com> Weinstein, pp 1077 – 1082 (30 May 2005)

⁴⁶ *Quest for the Past*. Readers Digest Services, Surry Hills, NSW, 1985, pp 69, 70.

⁴⁷ <http://www.chnmus.net/html/20060526/515930.html> *Oracle Bone Inscriptions*. (14 March 2005)



Fig 9
Oracle bone.

Christianity has an abundance of relics in the form of saint's bones, each with its own story of miracle cures. Bones have also been used as tools and ritual objects in Shamanism, witchcraft and sorcery, as totemic objects and personal fetishes. All these practices (and many others) have a wealth of often very personal and specific narrative history behind them, often extending back to pre-history. It is the research conducted into these remnants and the practices associated with them that are constantly reappraising the narratives of human history. The discovery of new fossils and advances in scientific techniques, particularly the genetic sciences, continues to change and extend the languages and narratives articulated by bones.

One innovation that has changed the manner in which the skeleton is literally viewed was the discovery of x-rays by Roentgen in 1895. This practice was originally associated with photography, as it used light and photographic emulsions and chemicals. The early practitioners were often photographers or physicians who practised photography as a hobby. Said to reveal the true nature of things, radiology was an invaluable diagnostic tool, allowing for the first time living bone to be examined painlessly and in great detail, revealing the presence of conditions such as arthritis and fractures. In 1896 x-rays were used to examine an Egyptian mummy, for the first time enabling an investigation to be carried out

without destroying the wrappings and dissecting the body. This technique revealed previously unknown data, such as the presence of growth arrest lines in the tibias of almost a third of the mummy specimens, indicating the general poor state of health during adolescence in ancient Egypt. Not only did radiology aid in informing and extending the language of medical diagnosis and treatment, but also that of archaeology and anthropology in the interpretation of skeletal remains.

Skeletal remains provide often the only evidence of atrocities committed during social and political unrest. The work done by forensic pathologists and anthropologists in the field produces the evidence used in the International Courts to prosecute the perpetrators of such crimes. Clea Koff states that one reason she became a forensic anthropologist was ‘to make bones talk.’⁴⁸ She details in her book, *The Bone Woman*, her experiences working in Rwanda, Bosnia, Croatia and Kosovo, excavating the mass graves from the atrocities committed there, stating ‘when the dead talk, the living should listen.’⁴⁹ Koff sees her work as bringing into the public arena those issues that many prefer to keep hidden. By exposing these issues Koff feels that she is giving the victims of the atrocities a voice that speaks of their fate.

The following image (Fig 10) of the excavation of a site in Croatia does not do justice to the situation, the two-dimensional aspect of the photograph distancing the viewer from the reality of the event. The bodies were too fresh to have become skeletonised and tragically more resembled bags of rubbish. In the context of the prevailing political situation this was perhaps how certain people were regarded. The victims in this particular image had been taken from a hospital, and aware of their fate some had hidden their x-rays on their bodies as a means for later identification.

⁴⁸ Clea Koff. *The Bone Woman*, Hodder Headline, Sydney, 2004, p 181

⁴⁹ Koff, Dust jacket, back cover.



Fig 10
Excavation of mass grave at Ovcara, Croatia.

Forensic artists now make it possible to literally put a face to what is otherwise a generic human remnant, restoring to the remains identity and individuality. This technique is used to aid in crime solving, to assist in identifying remains, and in the reconstruction of human and animal remnants from historic and pre-historic eras. Visually, this is perhaps the most powerful, evocative and immediate language now applied to bones. It has recently become more accessible to the public, in that these techniques often feature in popular TV dramas and documentaries. There is perhaps nothing quite so immediate as looking at the face of a person long dead, in some cases, for thousands of years; a viewing experience that can bring an individual to life in a manner that can be achieved in no other way. Facial recognition was perhaps one of the earliest and most basic survival tools and methods of communication – the ability to recognise a potential enemy or friend, and being able to read and recognise the language of facial expression before verbal language evolved. The power and immediacy of facial reconstruction is demonstrated by the following examples – that of Yde girl (Fig 11), a bog body (dating from approximately 2,000 years ago) found in the Netherlands in 1897, whose facial reconstruction was done by a forensic artist, and Tutankhamun's facial reconstruction (Fig 12), made from CT scans of his 3,300-year-old mummy.

These images enable the viewer to see these people as they may have looked in life. The immediacy of the gaze perhaps has as much to do with the subjective interpretation of the artist or the person using the software, as being a true representation of the features (soft tissue reconstruction is often left up to the maker's informed interpretation). The viewer now has an opportunity to return the gaze of these people, who have been given a reality as individuals through their reconstructed faces.



Fig 11 Yde girl facial reconstruction

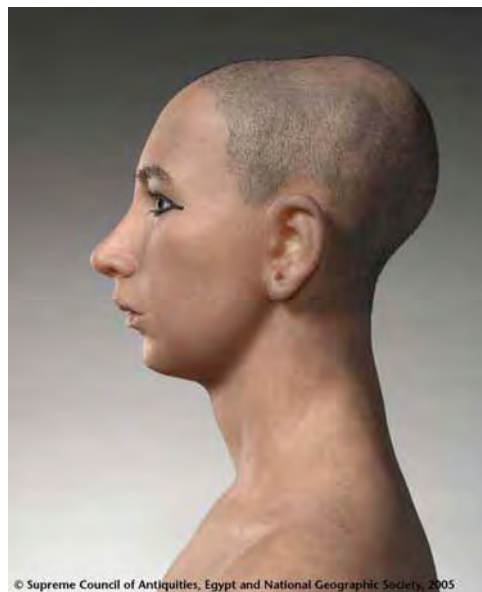


Fig 12 Tutankhamun's facial reconstruction.

Many details can be revealed about an individual's physical life by examining the indications of muscle attachments to the skeleton. In some cases where the muscle attachments to the skull are well defined it is possible to describe the most important visual language to humans – that of facial expression. James Chatters, a forensic anthropologist, described an example of this. He was involved in the examination of Kennewick man, a 9,500-year-old skeleton found in Washington State, USA in 1996. Kennewick Man had led a physically hard life and suffered from many chronic ailments, as well as enduring a stone spear point lodged in his pelvis that would have caused him considerable discomfort, if not real pain in the course of his everyday activities. Each muscle plays a different part in creating patterns, ridges and indentations in the skeletal structure, and this is as true concerning facial expression. The different patterns formed in the bone provide evidence of the facial expressions commonly used in life.⁵⁰ During the reconstruction of Kennewick Man's face Chatters realised that the build – up of bone ridges, the result of muscles being frequently used, were consistent with the muscles used in creating an expression of discomfort. On viewing the cast of the skull, John Gurche, an associate of Chatters, remarked: 'this guy cried a lot.'⁵¹

This reconstruction brings an intensely personal element to these remains, giving them an immediacy that would not otherwise be possible. It is possible to imagine this man's expression of pain and construct a narrative about his life. (Would his continual discomfort have made him irritable and bad tempered to know, or would he have borne his problems stoically?) Kennewick Man is an intriguing case. His facial/skeletal characteristics were atypical of Palaeo-Americans, having more typical Polynesian, Ainu (aboriginal Japanese) or Nordic features⁵² (Fig 13). Unfortunately the scientific narrative in this case is incomplete, as Kennewick Man's remains were (as of 2001), in a state of limbo. The US government has taken custody of the remains, waiting on the outcome of court appeals between the Native Americans of the area who want to reclaim the

⁵⁰ James C Chatters. *Ancient Encounters. Kennewick Man and the First Americans*, Simon and Schuster, New York, 2001, p 145

⁵¹ Chatters, p 145

⁵² Chatters, p 177

remains to bury, and James Chatters and other scientists who want to continue their study of the remains so the story of this unique man can be told in full.



Fig 13
Kennewick Man

When bones are moved or removed from their original contexts, the manner in which they are perceived, and therefore their language, changes yet again. Perhaps the most out of context location to view skeletal remains is in a museum setting. The viewer often has no sense of an immediate connection with such remnants, as often the atmosphere is sterile, the organisation of the displays (cabinets and cases) enhancing the sense of distance. (This will be discussed in greater detail in Chapter Five, in relation to the arrangement of my shelf installation with bones and associated objects and the languages generated through these associations).

Often the remnants are perceived as being so far removed in time, space and history from their origins that there is no real sense of empathy or connection with them. In this context these remnants have been so distanced from their place that their original story is lost. However, nothing exists in isolation and any skeletal remnant, whether a fragment or a complete skeleton, will have multiple narratives connected to it depending on type or context. The accumulated weight of this history can be such that the many overlaid languages will subsume the original context of bone.

Other forms imposed on bones also remove them literally and figuratively from the body and the grave, creating new languages that speak of them as tools,

weapons, art forms and decorative elements. These examples provide a narrative of cultural, technical and ritual beliefs and practices, being the traces of peoples' history and traditions. The interpretation of the language of these objects, particularly when created by a people no longer living, is often quite subjective. No matter how objective an examination may be, it can often be coloured by the viewer's own cultural background, knowledge and experience. These aspects can influence the language, particularly in relation to objects with specific cultural connotations, and adds yet more strata to their story. Gooding and Furlong's statement 'language is, with drawing, one of the two primary and definitive media of human culture,'⁵³ defines the correlations between art and language as communication systems that perpetuate cultural and social traditions. Bones also act as communicators in this context, and in Chapter Three I discuss the way in which bones feature as cultural expressions in Palaeolithic art forms, the Mexican Day of the Dead celebrations, and the Sedlec Ossuary in Czechoslovakia.

⁵³ Mel Gooding and William Furlong. *Song of the Earth. European Artists and the Landscape*, Thames and Hudson Ltd, London. 2002, p 43

Chapter Three

Turns the Bone About.

Seeking the Language of Bones through Cultural and Ritual Practice.

Cultural practices can be subdivided by classification into three groups that describe specific differences that define particular cultures - that of values, norms and artefacts.⁵⁴ Ritual practice is the repeated formal, outward manifestation of specific behaviours that express the beliefs or traditions of a society that establishes cohesion through shared experience and belief.

I have investigated three examples of bones as used in cultural and ritual practices. These are Palaeolithic bone objects, the Mexican Day of the Dead festival and the Sedlec Ossuary. Each of these practices involves the alteration of bones in one form or another, either by physically manipulating/reshaping them or the way in which they are used or displayed. Each adaptation generates a different language through these alterations. The relationship of the three cultural practises, the languages they generate and how these are expressed in the three components of the exhibition will be discussed in detail in Chapter Five.

The Upper Palaeolithic era (40,000 - 10,000 BCE) was so rich in art and artefact material that it is impossible to examine it in any great detail in the context of this work. I will therefore be focussing on the creation of bone objects in the form of ritual objects, tools, weapons and ornaments. Bone was a convenient and plentiful raw material that was relatively easy to work, and the languages associated with it changed according to how it was utilised.

Some of the earliest examples of sculptural objects are the carved 'Venus' figurines (27,000 BCE).⁵⁵ Only a few inches high and common throughout Europe, they were made of bone, ivory or soft stone. They are usually interpreted

⁵⁴ http://en.wikipedia.org/wiki/Culture#Defining_culture *Culture*, Wikipedia Contributors (27 April 2005)

⁵⁵ *Quest for the Past*, p 13

as being fertility fetishes,⁵⁶ but other theories propose that they may have represented the ideal of female desirability at the time,⁵⁷ or that this particular body shape was the norm, in that to survive the cold winters a large supply of body fat was necessary, laid down in the summer when food was plentiful.⁵⁸ As fertility objects their exaggerated breasts, stomachs and buttocks epitomised the female aspects associated with fecundity, perhaps invoking the cycles of birth, death and renewal (Fig 14). Their heads were insignificant and featureless, suggesting that they were not intended to represent an individual person, or even a particular deity. The small, pointed feet suggested perhaps that they were to be pushed into the earth. If this were the case, there is the implication that the symbolised fertility embodied in the



Fig 14
'Venus' figurine.
Perigordian era. 23,000 – 25,000 BCE

object was sympathetically transmitted to the earth, ensuring the renewal of important food sources. As ritual objects, their language moves beyond the

⁵⁶Johanson and Edgar, p 102

⁵⁷*Quest for the Past*, p 12

⁵⁸*Quest for the Past*, p 12

personal and becomes the collective language of a people or culture, appealing to elements beyond their control or understanding to ensure the continuity of life.

The language of personal objects (ornaments, weapons) invokes an individual, as opposed to a group narrative. This language involves the narrative of the maker/giver, the reason or circumstances by which the object was created and how the owner/wearer came by the object. Therefore these bone objects carry a rich density of layered meaning, and in the process also lose the identity of being a bone, and become the object, or the personal possession. However this interpretation is necessarily subjective – the voice of the original maker is long since lost, but the language implied by some of these bone objects informs current knowledge of certain cultural practices. Although still hunter-gatherers, the art and tool making activities of these people indicated that they were well organised in providing sufficient food and adequate shelter, enabling them a certain amount of leisure time in which to create such objects. The presence of some objects can indicate specific activities, the evidence of which does not otherwise survive, such as garment making. Hides and skins that would have been used as clothing are subject to rapid decay, but the presence of bone needles (which were no different from the needles used today: Fig 15) in the archaeological record indicates for instance, that garments were shaped and sewn, rather than just hung or draped about the body.



Fig 15
Bone needles. 4,500 – 4,000 BCE.

Some engraved bone pieces have been interpreted as evoking a ‘sympathetic’ meaning or magic, as with the engraving of the hinds on a reindeer’s foot bone (Fig 16). Perhaps the engraving reflected the essence or being of the reindeer or that of the maker if the object was a Totemic symbol. Pragmatically speaking, it is also possible that the engraving was a preliminary sketch for a larger work.



Fig 16
Carved reindeer foot bone from Le Chaffaud grotto, with a depiction of two hinds.

Bones were also used as a surface to record information, and the carved eagle bone (Fig 17) created as a possible lunar calendar from Le Placard, circa 11,000 BCE; possibly represented a record and memory device. It is an example of notation – an early written record that could probably be read and understood by others.

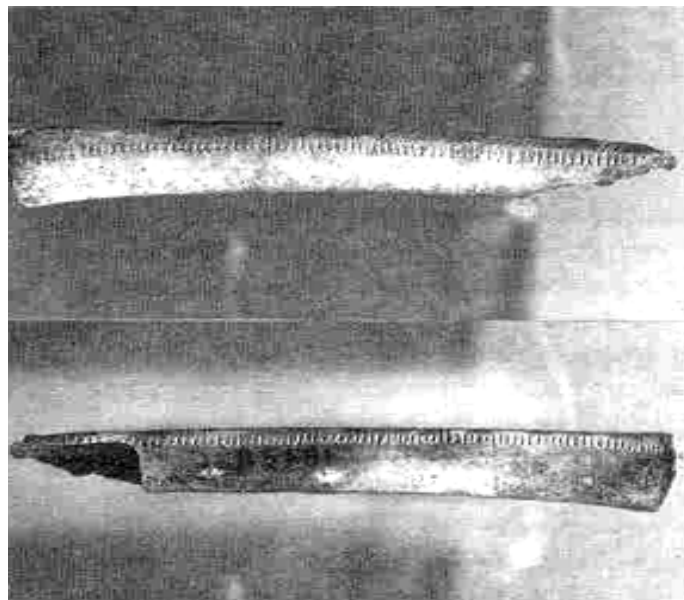


Fig 17
Carved eagle bone created as a possible lunar calendar. From Le Placard, France, circa 11,000 BCE.

If it is a lunar calendar it indicates that the moon phases were noted and understood, perhaps regarding seasonal animal migrations and food gathering. This bone is imbued with an obvious form of language, but its story is open to conjecture. However, it is tempting to consider that the use of an eagle's bone could involve a symbolic language in itself, in that eagles are high-flying, sky creatures, elements of the air, closer to the moon than humankind. But sadly the voice of its creator is silent and the original language associated with this object is now lost.

This era is also well-known for the richness of its decorative art, and for the development of a pure abstraction of form and design. However, the language of the rich, complex spiral and chevron designs on what have been called half-round rods (decorated on the curved side, unadorned on the flat side: Fig 18) has been lost, even the purpose of the rods themselves is unknown.



Fig 18
Half-round Rods. France, 12-25,000 BCE

The language implied by such rich decoration would suggest that they may have had important ritual purposes, in that pertaining to prehistoric art forms, the more lavish or highly decorated the object the more important or more personal it was.

This is where the language of these objects becomes confused, as it has been suggested that realistic representations appeared on durable objects, and schematic designs on more expendable objects.⁵⁹ Therefore, in spite of the richness of their abstract decoration, the half-round rods would seem, according to the interpretation of their design, to be expendable objects.

Perhaps one of the most exquisite items of portable art – carved from mammoth tusk – is the female head from Brassempouy, France (Fig 19).



Fig 19
The lady in a hood - a statuette carved from mammoth's tusk.
Upper Palaeolithic era (20,000 BCE)
Brassempouy, France.

This particular piece is unusual in that it would appear to be a realistic portrait of an individual. Representational imagery, or any imagery of humans was rare in this period, and it is tempting to think that this piece may have been carried as a memory token, much as a photograph is today. Photographs are classic examples of portable art, much in the manner in which Susan Sontag describes the family

⁵⁹ Andre Leroi-Gourham. *Treasures of Prehistoric Art*, Harry N. Abrams, Inc. Publishers, New York, n.d. (1967?), p 80

photo album as a 'portable kit of images that bears witness to its connectedness.'⁶⁰ If this piece was carried as a memory token its presence implied a connection with the person it represented, therefore the language associated with it would have been highly personal and heavily imbued with a specific narrative.

Hyoid bones were crafted as pendants with only minor alterations, into the profile of a small horse's head (Fig 20). The shape of the bone itself may have suggested the end result, as the shape of horses' hyoid bone (and that of herbivores in general) is reminiscent of a horse's head. To shape the pendant the contour of the bone only needed retouching and the eyes and mouth incised to complete the image. A hole to create an ornamental pendant was added as a final touch. It is possible the original shape of the hyoid bone went some way to determining the final appearance of the object. Many of these crafted items were small and portable, suggesting that they were personal, useful or important items. The language associated with these objects would have been dictated according to the object type and its use or purpose. Their language would have been further influenced depending on whether the objects were strictly personal items or whether they belonged to the group as ritual objects. Their associated languages would have been as integral to them as the inscriptions or engravings. These languages would have given the objects an extra dimension, a life and energy beyond the object.

⁶⁰ http://www.umich.edu/news/MT/NewsE/09_05/movies.html Frank Beaver, 'Talking about the Movies: Susan Sontag *On Photography*', Michigan Today News, September 2005 (21 December 2006)



Fig 20
Carved silhouettes - Hyoid bone pendants.

While these objects provide a tantalising glimpse into the lives and customs of these people, there remain points on which to ponder, that are ultimately unanswerable, such as the incised lines on the bottom pendant (Fig 20). These would almost seem to suggest the presence of a halter or bridle, but as horses at this time had not been domesticated and were primarily a food source, this would seem unlikely.

The following examples of the mores expressed by the use of bones in cultural practices involve languages that are also rich in history and tradition, but unlike the language forms expressed in the Palaeolithic era, these began in the era of recorded history and are still alive and understood today.

The Mexican Day of the Dead festival is a celebration welcoming and honouring the ancestors.⁶¹ It is thought to have its origins in early Mayan, pre-Hispanic tradition, with Catholic theology and medieval ritual grafted onto ancient

⁶¹ Elizabeth Carmichael and Chloe Sayer. *The Skeleton at the Feast. The Day of the Dead in Mexico*, British Museum Press, London, 1991, p 7

traditional practices. Mexican people of the small Mayan communities in the Camino Real Alto region of the north-western Yucatan Peninsular are thought to be unique in their celebrations of the dead in this particular manner, which is celebrated on 1st and 2nd November. It is a time for parties, processions, special meals and masked dances, during which the souls of departed loved ones are welcomed back to earth, and reassured that they have not been forgotten. The dead are initially interred in coffins, however after three or four years the coffins are dug up, the bodies removed and the bones are dried in the sun and then scrubbed clean. The bones are then put into small wooden boxes that are placed inside cement structures where they can be viewed through wrought iron doors. Before and after the Day of the Dead celebrations, the families of the deceased place flowers and candles in front of these structures, and the doors are left open for viewing. Those involved in this tradition liken it to visiting and paying respect to their living relatives, and the bone cleansing as the same as washing, dressing or caring for elderly relatives. Traditionally, the celebration takes place in the family home with a private feast, however, particularly in the urban centres; the celebration now includes popular 20th century iconic imagery, along with the traditional skeletons, sugar skulls, puppets and toy coffins. Demons, Draculas, Batman, witches and the plastic pumpkins of Halloween are now included. Indeed, where the feast has moved to America with Mexican immigrants it is becoming included with the Halloween celebrations. The skeleton at the feast is the symbol of these festivities, and is perhaps also, as Carmichael and Sayer write, symbolic of 'the spectre of past history.'⁶²

There was a strong theme of skeleton forms throughout the pre-Hispanic era, and during the Classic period (AD 200 - 900), skulls often formed part of architectural decoration or as ornaments on costumes in representations of the rulers. From the 18th century images of Death in the form of a wooden skeleton were paraded through the streets. This practice had its origins in the medieval images of Death that were brought to Mexico by Spanish conquerors.

In 1843 John Lloyd Stephens wrote in the second narrative of his travels in the

⁶²Carmichael and Sayer, p 7

Yucatan that when visiting a church he noticed that skulls were arranged about the interior, with their names inscribed on their foreheads and pleading for prayers to be said for them. On inquiring why they were not buried, he was told:

--- in the grave they are forgotten, but when dug up and placed in sight with labels on them they remind the living of their former existence and appeal to their friends as with voices from the grave to pray for them.⁶³

(It has been suggested that perhaps this is the origin of the sugar skulls, with the name of the recipient piped in icing on the forehead). In this instance, the voices of the bones would be known and recognised allegorically, but were perhaps only heard by those who could read – the narrative concerning individual skulls would be all-important and highly personal.

Skeletal forms are universal, cross-cultural symbols of death, but in the context of this festival they are ‘dressed up’ as dancers, musicians, members of wedding parties or as purely decorative objects (Fig 21). The imagery is also made palatable – sweetened in the form of sugar skulls (Fig 23) and sweets, and made familiar, as personal and household items such as necklaces, bracelets, earrings and decorative tiles, ashtrays, glassware and toys (Fig 22). The symbology of death is publicly paraded (no skeletons left in the closet here!) There is a sense of renewal and reconnection with the deceased, using life-affirming symbology of food, drink and flowers, acknowledging and accepting death as a part of life. The spirit of this festival could perhaps be interpreted as a defiance of, or laughing in, the face of death, challenging life to take the ultimate step by removing it altogether.

⁶³ John L Stephens. *Incidents of Travel in Yucatan*, 2 Vols. 1843, cited by Carmichael and Sayer, pp 48,49



Fig 21
Jose Luis Serrano
Day of the Dead Skull (no date-2006?)
Ceramic



Fig 22
Martin Melchor
Wood Carving (no date-2006?)

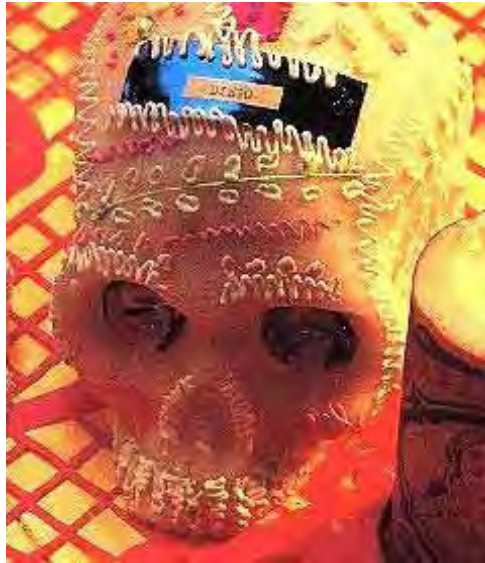


Fig 23
Sugar skull.

While the Day of the Dead festival uses skeletal symbology in an active celebration of death, the Sedlec Ossuary in the Czech Republic uses skeletal remains in a contemplative manner as a form of interior decoration. This was not an expression of cultural philosophy, but came about simply because the graveyard became overcrowded.

The church at Kutna Hora, Sedlec,⁶⁴ in Czechoslovakia features bones as a form of interior decoration, expressing a quite contemplative, static language compared to that of the Day of the Dead festival. The Cistercian church's Abbot Henry initiated this display of bones in 1278 after a pilgrimage to Palestine. While there he visited Golgotha (the common name of the site where Jesus was crucified, interpreted by evangelists as meaning *the place of the skull*), and brought back a jar of earth, which he spread over the Sedlec cemetery. This 'Holy Soil' added significance to this piece of ground, making the cemetery more popular for burials and as a healing site. People from all over Central Europe brought their sick relatives to Kutna Hora believing that the holiness of the ground ensured them a place in heaven. As a result, the cemetery became overcrowded, with most of the bones dating from 1378, when plague swept through Kutna Hora. Through sheer necessity, the ossuary was created in 1511 in the existing All Saints Chapel.

⁶⁴ http://www.ludd.luth.se/~silver_p/kutna-info.html Frisco Ramirez. *The Ossuary in Sedlec – Kutna Hora* (March 20 2004)

Rather than close the overcrowded cemetery, the remains were disinterred and placed in the crypt to make way for new burials.

In 1870 the Duke of Schwartzenburg commissioned local wood carver Frantisek Rindt to decorate the interior of the chapel with the human remains, hence the Schwartzenburg coat of arms as one of the decorative pieces (Fig 24). This church is so richly decorated with these remains that the eye and the mind are overwhelmed by the lavishness of the decorations. The physical reality of the bones as skeletal remains no longer registers (Fig 25). The easy manner in which the bones share the space with the religious statuary (Fig 26) could also be the reason why the visual impact is not as macabre as could be expected. These objects appear comfortable with each other, co-existing amicably through the familiarity of long association, which no doubt evokes a sense of harmony and peace (although I have been told that the smell is unpleasant).

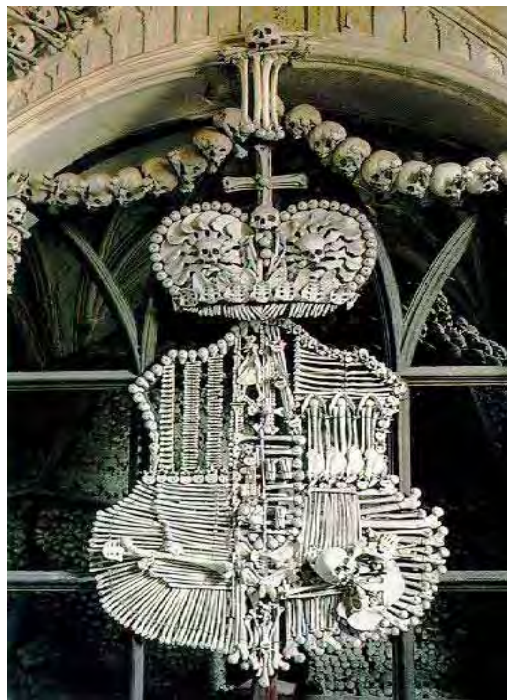


Fig 24
Schwartzenburg Coat of Arms



Fig 25
Interior, Sedlec Ossuary.

These bones have lost their connections to the human body (literally and metaphorically), and while still bones, their language has changed from that of being bones in their own right, to becoming an abstraction (removed from their original context and framework of meaning and identification) through sheer visual overload. The process of their being separated, dispersed and rearranged, often according to type or shape to create aesthetically pleasing arrangements, has articulated a new language for these bones. They have lost their sense of once having been individual, identifiable beings. Perhaps a slight sense of the surreal is engendered with the sight of human skulls strung in rows across the ceiling, or bones being made into the crest of a ruling family, but the sheer decorativeness of it all overwhelms the eye, the individual components are lost, and the eye and mind only register the larger shape and pattern of the overall structures.



Fig 26
Sedlec Ossuary – Detail

The reasoning behind the use of human remains as decorative pieces in an era of social and religious conservatism is intriguing in itself. It leads one to wonder about the personal feelings and reactions of the people involved regarding the bones, given that in general human remains engender feelings of discomfort or unease, given that they are common indicators of mortality. However, there are no indications that the bones were ever identified as belonging to particular individuals, and as the remains are so old, I doubt there would be a sense of having a personal connection to them. They stand more as symbols from recorded history that perhaps remind visitors of Abbot Henry's pilgrimage to Palestine, and of the devastating results of the plague that decimated Europe's population in the 14th century.

In concluding this chapter, it can be seen that although the use of bones is common to the case studies of these three cultural traditions, the three languages evoked are wholly influenced by the manner in which the bones are shaped and utilised and their relevant cultural contexts. All these examples exemplify bones

as symbols – ‘the visible object revealing to the mind the existence of an invisible presence.’⁶⁵

The language of the Palaeolithic bone objects contributes to the language that informs the knowledge of the development of human social and cultural evolution, as disseminated through scientific disciplines. This story continues to evolve, with the languages enriched and the narratives changing in the light of new discoveries.

The Day of the Dead Festival in celebrating life, death and familial connections, contributes to language the perpetuation of a traditional practise that continues to evolve and change with the times. It is a reminder of the past by the resurrection of the ancestors and a celebration of life as lived in the present, all the while acknowledging death as the invisible guest at the festival.

The Sedlec Ossuary is an elaborate memento mori, the bones expressing the language of remembrance and resurrection. As stained glass church windows reminded the illiterate of the lives and deeds of the saints, so the bones in the Sedlec Ossuary provide a visual narrative of the origins of the ossuary. The language contributes to the historical record, not only as reminders death, but of the tradition of pilgrimage to the Holy Land in search of absolution and enlightenment.

By virtue of their existence bones are the memory tokens of once living organisms and therefore powerful symbols in any language. But as demonstrated in the examples of the three case studies and the collections of my project, how they are utilised and the contexts in which they are placed influences their interpretation and therefore the languages are applied to them.

The art domain is a field where the language of objects can be changed or manipulated by their contextual associations. Not all the artists I have referred to in relation to my research have referenced bones. However the techniques of

⁶⁵ Barbara Maria Stafford. *Symbol and Myth. Humbert de Supervilles' Essay on Absolute Signs in Art*, Associated University Press Inc, New Jersey and London, 1979, p 8

some of the artists relate to the manner in which I have imaged bones as objects, and how the contexts in which the objects are displayed influence their associated languages. In the following chapter I will examine and discuss how and why these artists' images and work practices relate to my image making and installation.

Chapter Four

To Grave in Living Bone.

Seeking the Language of Bones through Arts Practice.

The languages associated with bones in the context of visual referencing systems have changed over time, particularly the symbology connected with the human skull. It has been used historically with a variety of meanings and is recognised cross-culturally as a symbol for danger, death or poison. Combined with crossed femurs it is a globally recognised symbol for piracy (Fig 27), and by extension, immediately recognisable as visual shorthand for danger. Forty writes (regarding pirate symbology) that the skull symbolised the life force contained in the head, and the crossed thighbones indicated the vital force carried in the loins.⁶⁶

Therefore, in reality this was more a symbol of vitality and renewal than danger and possible death. Possibly, the language of interpretation depended on which side one was on!



Fig 27
Skull and cross bone emblem: Henry Every.

Historically the skull was also used symbolically in portraits to denote the intelligence or learning of the subject, or as a reminder of human frailty and mortality. The Vanitas paintings by artists from Flanders and the Netherlands in the 17th century depicted the skull in portraits and in association with objects that symbolically referenced the transience of life, the inevitability of death and the vanity of all earthly endeavours. Franz Hals' portrait *Young Man holding a Skull* (*Vanitas*) (Fig 28) is an example of this genre. In this context the skull was also a

⁶⁶ Sandra Forty. *Symbols*, Thunder Bay Press, San Diego, 2003, p 155

form of visual shorthand, its intended message immediately recognisable and understood. Today the message has become somewhat blurred, as the languages relating to art have become more complex and diverse as image symbology is reinterpreted and reworked.



Fig 28
Frans Hals
Young Man holding a Skull (Vanitas) 1626-8

The following two portraits with associated skulls illustrate the manner in which the allusion to death is epitomised by the presence of the skull. While similar in context, the messages they send are quite different. Having survived an attempt on his life in 1968, Andy Warhol's *Self Portrait with Skull* (Fig 29) is perhaps a reminder that death is ever present, even in the fullness of life, a constant companion from the instance of birth, forever looking over our shoulders as a reminder of the fragility and impermanence of life. Warhol explored death as the universal human constant in his paintings known as the 'Death and Disaster' series (1963) that focussed on celebrities (Marilyn Monroe for instance) who had been affected directly or indirectly by death.⁶⁷ He sourced media images of death

⁶⁷ <http://www.hatii.arts.gla.ac.uk/MultimediaStudentProjects/9697/9340071p/project/html/death.m>
The Great American Life and Death of Andy Warhol, 'Death Warholian Style', Joanne Patterson (30 December 2006)

by accident or disaster, and painted the instruments of death, for example the gun, atom bomb and electric chair.

Warhol's series of self-portraits with skulls continued his exploration of death, utilising light, soft colours, which perhaps suggested that in spite (or because of) his near brush with death Warhol considered that life should be enjoyed while possible. This has echoes with the celebratory nature of Day of the Dead festival – the end is inevitable, so why worry?



Fig 29

Andy Warhol

Self Portrait with Skull. 1978



Fig 30

Serbian War leader Dragan Vasiljkovic

Today public depictions of the skull, particularly in the media, are often used to illustrate criminal acts or war crimes, or to highlight reports on scientific, medical or archaeological research. The above media photograph (Fig 30),⁶⁸ which could just as validly be entitled *Self Portrait with Skull*, depicts former Serbian war leader Dragan Vasiljkovic posing in the manner of a trophy hunter displaying his most recent acquisition. Unlike the Warhol image, where the skull appears almost in a sense as an intimate companion, Vasiljkovic holds the skull at arm's length, the better to show it off. The immediate interpretation of this image is this man's involvement in the death of other people. The trophy hunter pose suggests a mission accomplished or perhaps, that he takes pride in his achievements. These images also reflect different ways of expressing truth. Warhol's image as an artwork is seen as being less valid a representation of reality than the newspaper photograph, which by its very nature as a photograph in the media is interpreted as being evidence of an event. These examples demonstrate not only how the languages associated with bones can be altered and influenced by the contexts in which they are shown or placed, but even their medium (painting, media photograph) influences how they will be interpreted.

In relation to my project I researched a variety of artists working in different media, some of who referenced bones as part of their work, such as

⁶⁸ *Weekend Australian Newspaper*. 21/22 January 2006. Vasiljkovic was arrested on war crime charges in Sydney, January 2006.

photographer Christine Cornish. Her images in her exhibition *Threshold* at Stills Gallery in 2004 ⁶⁹ (Fig 31) reflected similarities to my work. Consisting of a series of black and white pigment print images on rag paper, her images were taken from x-rays as were some of my images, although hers were veterinary x rays, while I sourced mine from friends and the Launceston General Hospital. Her images evoke the simplicity and purity of form evidenced in skeletal structures, allied with the ethereal quality so inherent to x-ray imagery and photograms.



Fig 31
Christine Cornish
Threshold 1, 2004

Isolating the bones from any contexts (as does Priola with his depictions of objects, p 63), emphasises their austere purity of form. Stripping them visually of extraneous information (in Cornish and Moore's cases flesh, and in Priola's examples, of the additional contexts of background information); allows the viewer to appreciate the forms/objects at a fundamental level, that is, the essential nature of their form and structure. The title *Threshold* of Cornish's work suggests a beginning or a revealing, an invitation to step over or through a doorway into a new place, to discover (in the example of Cornish's images) things that are normally hidden from view, obscured physically by flesh, or psychologically by

⁶⁹ <http://www.stillsgallery.com.au/artists/cornish/> Stills Gallery, Christine Cornish, *Threshold*, 2004. (14 March 2007).

some cultural perceptions that avoid references to or imagery that is associated with death.

The concept of using objects whose meanings have been altered by their association with disparate items is seen in South American installation artist Doris Salcedo's work. Her first solo exhibition *Unland* 1998 explored the personal tragedies of people affected by the violence and social and political unrest of her Columbian homeland. Salcedo uses furniture as sculptural forms, impregnated with the residues of domestic and personal life to explore the issues of displacement and dispossession (Fig 32). These residues consist of plates, zippers, bone, hair and buttons embedded on and into the furniture, creating 'an inanimate object where a wayward life-force has unexpectedly taken refuge.'⁷⁰ These residues create a narrative subtext that subtly enhances and extends the rudimentary language of the furniture/sculptural forms and stand as trace references of absence – 'the disappeared' (a reference to those who went missing under the violent political regimes of the time).



Fig 32
Doris Salcedo
Unland: Audible in the Mouth, 1998

These residue traces aptly express the silence – the helpless 'voicelessness' of the downtrodden and dispossessed, who themselves left little in the way of physical evidence of their existence. Salcedo's work invites the viewer to examine closely

⁷⁰Doris Salcedo, *Unland* http://www.newmuseum.org/more_exh_d_salcedo.php (7 April 2007).

her sculptural forms to discover these remnants, and compels contemplative consideration of the implications of small objects, such as bone, forced into cracks in the furniture. Salcedo's work brought to mind archaeological sites, with domestic objects and bones layered in strata as traces or evidence of previous lives. I saw in Salcedo's work similar concepts to those relating to my project – layers, traces, memories and evidence – represented by the objects as souvenirs or mementos of past lives. Her placement of objects within the furniture forms also reflected in a sense the techniques of Hall's cabinet and Boltanski's collections, in that her object pieces are similarly 'framed,' in her case by the furniture. These techniques and their concepts set the objects into specific narrative forms, in that the manner of their framing directs the way in which they are interpreted, forming a metalanguage that evokes further narratives to be constructed in response to them.

An apposite example of this is the work of sculptor Henry Moore, particularly his animal forms that epitomise the essence of bone in an almost metaphysical sense, his sculptural forms perhaps as far removed from the raw imagery of bones as can be imagined. Goethe, in coining the word 'morphology' recognised an inherent involuntary motion in all life forms and referred to bone as 'the consciousness of form.'⁷¹ Erich Neumann stated: 'maternal nature who creates the world of forms is the true object of Moore's work.'⁷² While carrying the subliminal beauty of the form and structure of bone into the realm of the abstract, Moore retained the sense of an animate force beneath the surface. This is particularly evident in *Goat's Head* (Fig 33), where a sense of listening alertness is captured by the curve of the head and the suggestion an ear.

While celebrating the form of bone, Moore simultaneously removed it from the memory of its connection with fleshy mortality. Many of his two dimensional works were drawn directly from observation, such as the Elephant Skull etchings.

⁷¹ <http://www.osteopathy.org/ot/apr/aprfeature.htm> British Osteopathic Association. (3 April 2004))

⁷² Erich Neumann. *The Archetypal World of Henry Moore*, Pantheon Books Inc, New York, 1959, p 21

These images provided a springboard for his imagination, extending the parameters of the two-dimensional and three-dimensional concepts of bone. In a similar vein to Moore's work, my images of bones are an exploration of their form, structure and innate beauty. I am fascinated by the sense of tension and strength that is evident in their structure, and the energy that is intrinsic to them as objects.

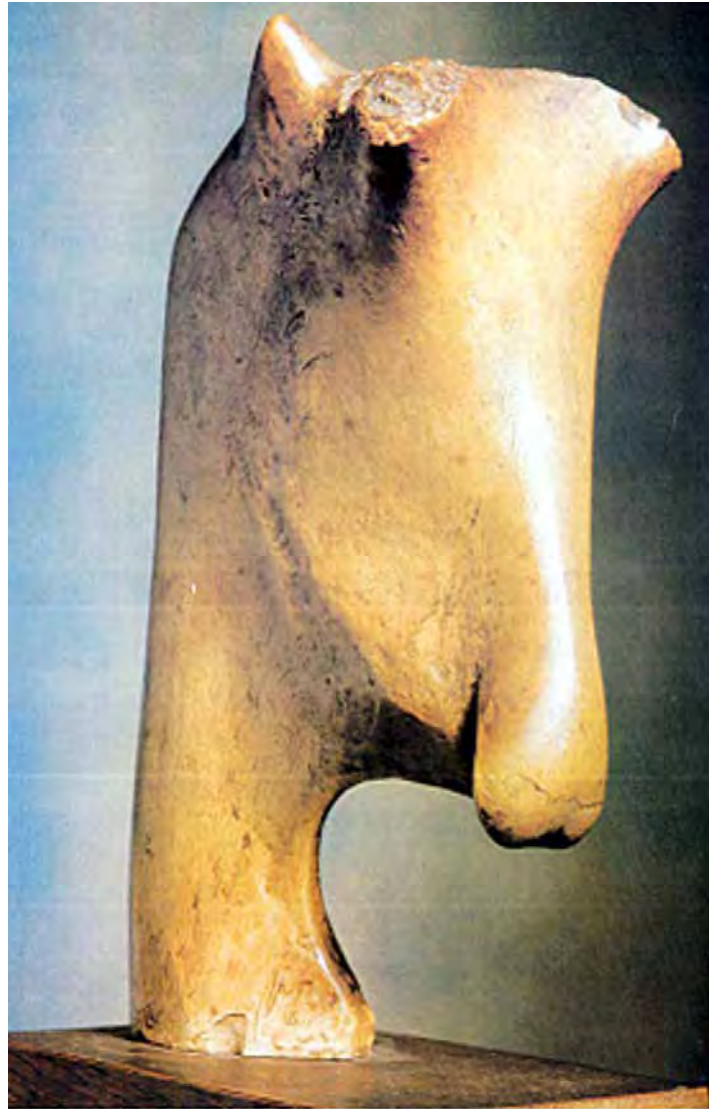


Fig 33
Henry Moore
Goats Head 1952.

As with Moore's *Two Piece Points Skull* (Fig 34), which is based on his elephant skull drawings, my images stretch the bones' perceived reality, taking them into a different dimension. They begin to resemble other organisms and organised

systems, such as plant forms and landscapes. Isolating the object within the frame of the image enhances this metamorphosis.



Fig. 34
Henry Moore.
Two Piece Points Skull. 1969

The immediate perception of the object being bone is removed. It loses the connotation of language often inherent in skeletal remains. This allows the bones to speak with a new voice; as Johnson cites Picasso; ‘the object lives its own life.’⁷³

J. John Priola’s photographic interpretation of objects in *Once Removed: Portraits* (1998) visually evidences Picasso’s statement. His objects ‘like fragments of memory appear vividly out of darkness, in isolation.’⁷⁴ By floating his objects into a densely black background, Priola imbues what are essentially ordinary things with an almost magical aura. In their isolation, stripped of other visual information (as Moore’s sculptural objects and Cornish’s bone images are

⁷³ Ellen H Johnson. *Modern Art and the Object. A Century of Changing Attitudes*, Harper and Rowe, Publishers, NY, London, 1976, p 10

⁷⁴ *Once Removed: Portraits by J. John Priola*, Arena Editions, Santa Fe, 1998, p12

stripped of flesh), they achieve a significance which they would not ordinarily have (Figs 35, 36).



Fig 35
J. John Priola
Boy, 1995
Gelatin silver print

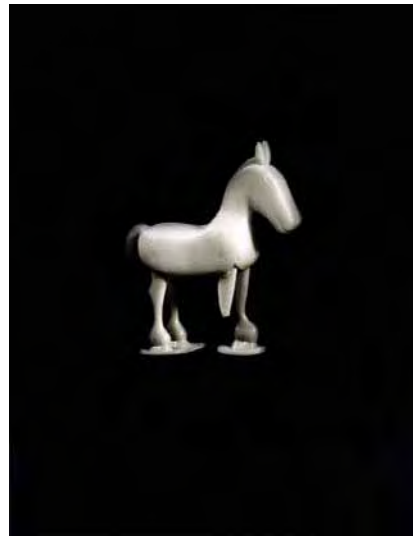


Fig 36
J. John Priola
Horse, 1995
Gelatin silver print

Solnit writes: ‘with symbolic readings the object is not read for its biography but for a presence illuminating, referring to an absent or immaterial condition.’⁷⁵ With reference to this, I found when creating the images for my book that the placement of bones into a dense black background resulted in them becoming disassociated from any specific structure. Rather, they have become absolute objects, and in being removed from their original contexts begin to articulate new languages – that of the abstract object, in which the object itself becomes language or information or theory.⁷⁶ This act of abstraction and isolation constructs a new reality for them. They evidence an innate language through which they articulate their validity as ‘object.’ This gives them the freedom to voice new narratives that are not restricted or influenced by their association with other objects or entities. The different languages evoked by my images and Priola’s is based on the type of objects depicted. Priola’s everyday objects (Figs 35, 36) are perceived very differently from bones. Each (bones and everyday objects) has their own associated languages that provide the catalyst for

⁷⁵ Rebecca Solnit, in *Once Removed*, p 114

⁷⁶ Johnson, p 43

subsequent interpretation. Priola's (often broken) objects suggest a probable history of domestic use, a nostalgic sense of toys and ornaments much handled and used. The bones, although depicted in a similar manner to Priola's objects, because of what they are suggest scientific or medical connotations – they have become specimens as well as objects.

Conversely, the woodcut images of the 16th Century Belgian anatomist Andreas Vesalius (1514 - 1564) place the skeletal form in specific geographical locations. His anatomical woodcuts describing the human form are exquisitely detailed and rendered (Fig 37), epitomising the purely structural essence of the skeleton.

He appropriated bones from gibbets to study skeletal anatomy⁷⁷ and on the basis of his research published in 1543 *De Humani Corporis Fabrica* (*The Fabric of the Human Body*) in seven volumes. Vesalius' images are a literal depiction of the structure supporting the human body.

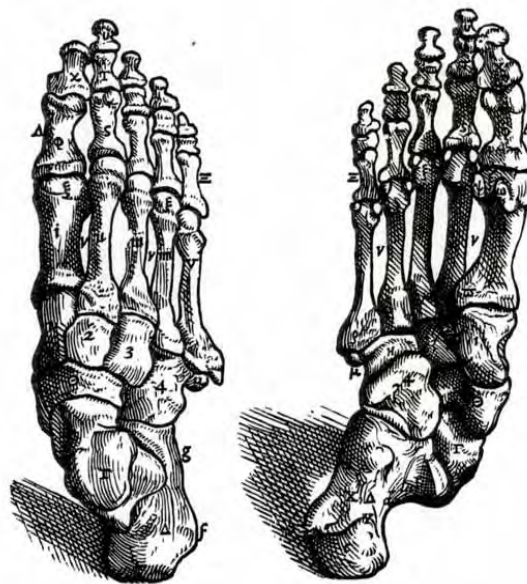


Fig 37
Vesalius
Woodcut 16th century.

⁷⁷ Goldberg, p 37

The forms are posed in different attitudes to demonstrate the articulation of the skeleton;⁷⁸ the image (Fig.38) of a skeleton reflecting on a skull became an iconic image that inspired Shakespeare's Hamlet.⁷⁹ The altar on which the skeleton is leaning is inscribed with 'genius lives on, all else is mortal,' alluding to the symbology of the skull as the seat of intelligence, and referencing the inevitable decay of the physical body.



Fig 38
Vesalius
Woodcut. 16th century.

⁷⁸ <http://vesalius.northwestern.edu/flash.html> *The Illustrations from the Work of Andreas Vesalius of Brussels*, The World Publishing Co. Cleveland and NY (10 August 2005)

⁷⁹ http://www.joh.cam.ac.uk/library/special_collections/early_books/pix/anatomy/The_Illustrations.htm *The Art of Anatomy*, St Johns University College, University of Cambridge (12 August 2005)

The hyoid bone is also depicted in this image (the small bone near the corner of the altar), perhaps silently articulating the potential for speech. The exquisite detail and textural effects of the etching and shading that rounds and forms the bones gives the figures a physical solidity and life that echoes that of Moore's two-dimensional and three-dimensional work (Fig 39).



Fig 39
Henry Moore
Pandora and the Imprisoned Statues.
Lithograph 1951

The placement of the skeletal forms in a landscape (Fig 38) invites the viewer to question whether these were landscapes known and experienced by Vesalius, or a generic landscape form that he employed to ground the skeletal forms and prevent them from appearing to float in space. Placing the skeletal figures into a specific context alters their language from that of a purely medical/scientific discourse and creates a narrative that speaks of these forms as individuals residing in a particular space or place. This specific context restricts the narrative interpretation of these forms. The narrative is guided by the pictorial context, unlike Priola's images,

where the lack of visual information surrounding the objects deprives them of a specific narrative location.

As with Moore and Vesalius, H.R. Giger's work also uses the sculptural elements of the skeletal form. His forms reference the inorganic rather than organic. Giger creates futuristic and nightmarish beings, suggesting a biomechanical world where humankind is evolving into a machine. His human forms are distorted, in some cases encased in chitinous-like body armour, the skeletal elements appearing to extrude through the epidermis. While the following images (Figs 40, 41) highlight the contrast between the inorganic and the organic, the structural similarities are evident, Giger's image retaining the organic elements of the skeletal form, but enhancing and extending the impression of an 'other being' through the use of modern materials, such as fibreglass and cast aluminium. These techniques, and the title *Virus* that suggests an invasive contagion, encourage the viewer to interpret this piece as being 'not quite human,' perhaps slightly threatening because of its robot-like structure, and the implication of incursion at a microbial level.



Fig 40
Virus 2000.
H.R. Giger.



Fig 41
Jo Pitchford
Dialogue 2006
Digital print. (Detail)

Giger's work reflects the 20th and 21st century perceptions of a world that is becoming less human; a world in which the boundaries between the organic and inorganic are becoming blurred. The prospect of the humanoid is reflected in the architectural work for the bar in the H.R.Giger museum (opened April 12th 2003) in the Chateau St. Germain in Gruyeres, Switzerland (Fig 42). The bar features skeletal-like structures arching over the space, echoing the architectural elements of skeletons and epitomising the strength inherent in bone forms.



Fig 42
Museum Giger Bar. Construction in progress
Photo 2002 Megan Rush.

The structure in the above image (Fig 42) is a reminder of the interior of the Sedlec Ossuary. The bone forms are arranged in particular patterns or designs in a specific space, although here they function structurally as well as decoratively.

The Polish artist Zdzislaw Beksinski (1929-2005) also uses bony forms pushing through an outer surface. Beksinski's images are of natural, organic systems, surreal and psychologically dark. Throughout the 1980s he executed a series of paintings depicting skeletal forms as components of physical systems in surreal landscapes. Trees reveal their skeletal forms and monolithic edifices are encroached upon by bone-like growths (Figs 43-45). Beksinski's technique metaphorically peeled back the skin and exposed what is beneath. He imparts a luminescence to his work that otherwise inhabits the shadowy world of the subconscious, where fears can emerge as nightmares. In Beksinski's human forms the bone structure is extruded to form an almost armour-like outer layer, giving these forms, like Giger's, an almost robotic appearance, but unlike Giger, Beksinski retains the essence of his forms as organic systems.



Fig 43
Beksinski. 1985.



Fig 44
Beksinski



Fig 45
Beksinski 1984.

I began to see in Beksinski's work the concept that all natural systems are interrelated and connected, with similar patterns being repeated. His images articulate the same concept that I later found emerging in my images. I saw my bones evolving into different entities and other organisms, bringing me to the conclusion that any methodical investigation of natural systems will eventually reveal these repeated patterns and designs.

Pattern and design are also the essence of photogram images. Photograms are photographic images made without a camera. Placing objects on light sensitive photographic paper, then exposing them to light will reveal the silhouette of the objects. Once exposed, the photographic paper is then developed in photographic chemicals. The resulting image is in negative format, similar to x-rays, with variations of light and shadow coming into play depending on the variations in the translucency and density of the objects. Pattern and design are realised by the shape of the objects and their relationships to each other.

Photograms were part of the invention of photography and originated as sun prints, made directly from nature by exposing objects or organisms in sunlight onto light sensitive surfaces. During this period, the photogram was utilised as a scientific record of nature, rather than considered as a medium of artistic expression. Australian photographers Harry Nankin and Stephanie Valentin are following in the tradition of the early scientific observers, recording natural organisms, in Nankin's case, as photograms directly from the landscape. Valentin's investigation of the natural world is realised through photograms and photographic prints of plants and insects and microscopic imagery of pollen grains etched with text.

Nankin's work embodies all that photographs and especially photograms allude to: the absent subject, or as Baudrillard stated: 'the immanent presence of the object, rather than the representation of the subject.'⁸⁰ Baudrillard also stated, and this is particularly relevant to photograms: 'every photographed object is simply the trace left behind by the disappearance of everything else.'⁸¹

⁸⁰ Jean Baudrillard. *Art and Artefact*, Sage Publications, London, 1997, p 33

⁸¹ Baudrillard, p 28



Fig 46
Harry Nankin.
Contact/Quadrat 8. 2003
Photogram.

Photograms do not represent the object as such, but rather its shadow in the form of a ghostlike emanation. The shadow is captured as an image after the physical presence has gone (Fig 46). Shadows and photograms are indicators in the same sense as skeletal remains are of once present physical entities, where the corporeal body has vanished leaving an imprint, a visible memory shape that like a memory, is there, yet not there.

Photograms and bones evidence traces in the same sense that fossils and bones are traces in the geological/archaeological record. When considered in this sense the language changes from that expressed in the language of art terminology about The Object as an art form, to that expressed through technical or scientific terms that references The Object as a scientific, medical or archaeological specimen. However, depicting the object in isolation – on a black background – removes it from any associated contexts; therefore the viewer is presented with the opportunity to create their own narratives about the image.

Nankin's recent work *The Rain* (Fig 47) at the Devonport Regional Gallery⁸² of rainforest sites in Tasmania, lyrically reflects the transient qualities of natural systems, and as Troy Ruffels writes: 'capture the constant processes of growth, form and decay.'⁸³ This statement expresses the correlations I see between bones

⁸² *A Precipitation in Time*. 26 May – 25 June 2006, Devonport Regional Gallery.

⁸³ Troy Ruffels, Catalogue essay, *A Precipitation in Time*, Devonport Regional Gallery, 2006.

and photographs – evolving, forming and decaying, as traces and memory systems.

Nankin's images, of ephemeral and fugitive natural occurrences, I consider to be visual metaphors that can be compared to the ephemeral nature of the language used to describe and shape the perceptions of bones.

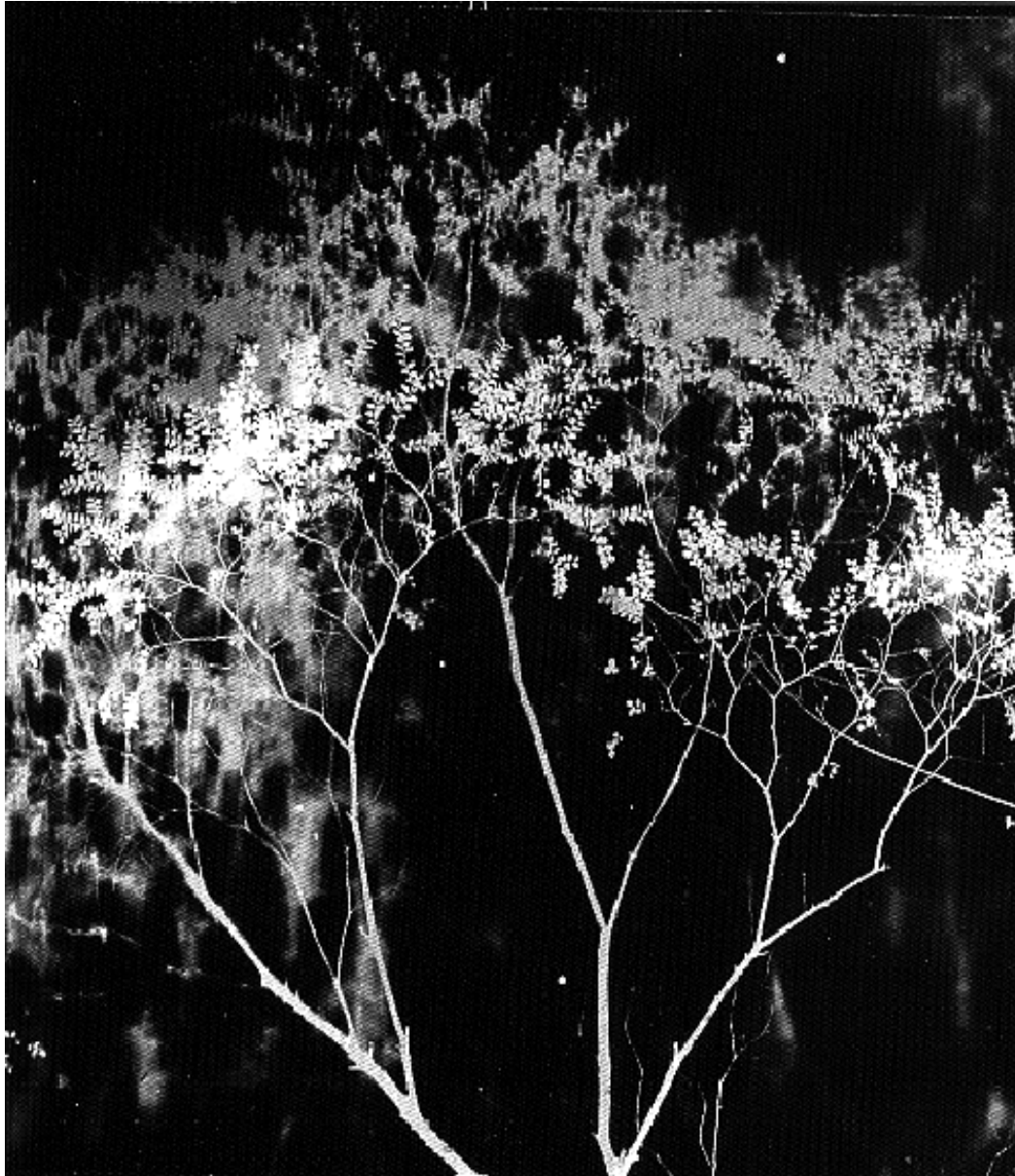


Fig 47
Harry Nankin
A Precipitation in Time 2006
Photogram/shadowgram.

Self taught German photographer and educator Karl Blossfeldt (1865-1932) and contemporary photographer Stephanie Valentin are both known for their plant form imagery. I consider their work relevant to mine because both evidence the qualities I feel are germane to my images. Blossfeldt photographed plants to demonstrate to his students the perfection of form and structure in nature, which is equally demonstrated in skeletal forms. His images, although admitted into the realm of high art, can equally be seen as scientific/botanical specimens, thus inviting a scientific narrative to be added to their language as art form. This interpretation is further encouraged by the images' Latin botanical names (Figs 48, 49).



Fig 48
Karl Blossfeldt
Acer rufinerve 1928
Photogravure.



Fig 49
Karl Blossfeldt
Aristolochia clematitis 1928
Photogravure.

Valentin's photogram images of plant forms from her exhibition *Chiasma*⁸⁴ (Figs 50, 51) echo Blossfeldt's images. Valentin's images do not focus so much on the purely structural elements of organic systems; rather her forms evoke a sense of the fugitive, transient fragility that alludes to the vulnerability of all bio-systems. Her images express her fascination with biotechnology and an appreciation of the interconnectedness of natural systems,⁸⁵ an echo too, of Nankin's work. I see similarities with my x-ray images in her photograms of plant forms. Both reflect the technique of x-ray imagery, giving the impression of seeing into or through

⁸⁴ Stills Gallery, Paddington, NSW, 1998.

⁸⁵ <http://www.stillsgallery.com.au/artists/valentin/> Stills Gallery (10 April, 2007).

the object. Valentin also literally imposes language on her images. In her series *Pollinate* (2002), Valentin has imaged pollen grains using electron microscopy to engrave them with text, using an advanced technique of microscopic ‘etching’⁸⁶ (Figs 52, 53). These two images definitively demonstrate how Valentin’s application of language directs and defines how an image will be interpreted by the viewer.

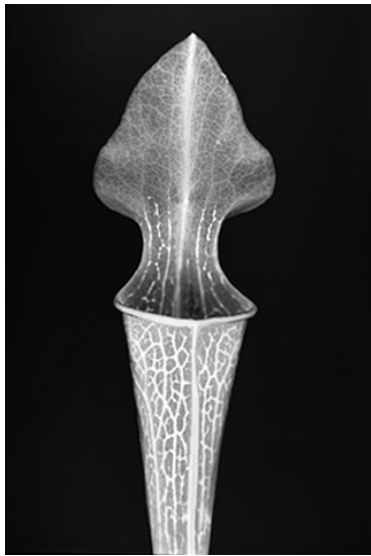


Fig 50
Stephanie Valentin
chiasma #11, 1998
from *Chiasma*
Gelatin silver photograph



Fig 51
Stephanie Valentin
chiasma # 7, 199
from *Chiasma*
Gelatin silver photograph

⁸⁶ <http://www.f5komma6.de/nw/artists.php?lang=en&artist=3219&show=text> Stephanie Valantin, Galerie für Fotografie, (11 April 2007).

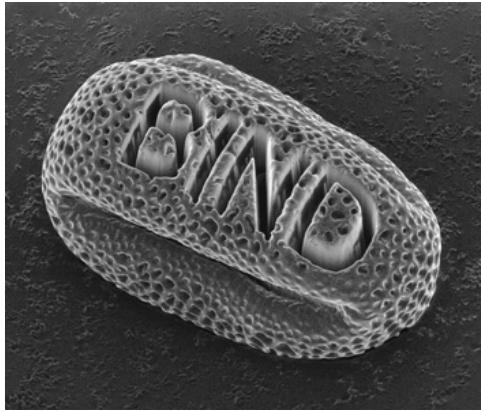


Fig 52
Stephanie Valentin
anthirrium majus
etched pollen grain
magnification 10000 x 2002
From *Pollinate* 2002

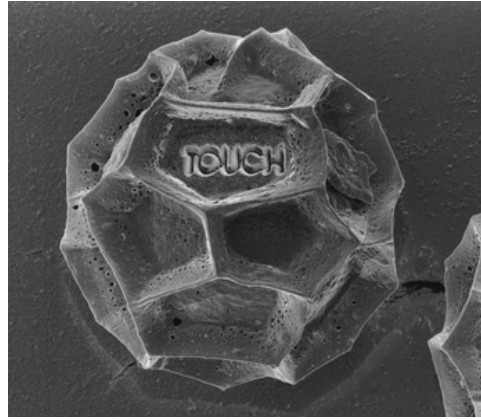


Fig 53
Stephanie Valentin
arctotis 1
etched pollen grain
magnification 6500 x 2002
From *Pollinate* 2002

The language she chooses for each grain also demonstrates control over the element, each word metaphorically reshaping the pollen grains, setting them into specific frames of interpretation. These images demonstrate the power that language has to shape perceptions, and also applies to the manner in which bones are metaphorically shaped and perceived by the languages applied to them.

I find Harry Nankin's and Stephanie Valentin's photogram images aesthetically engaging, and photograms an appropriate medium to explore the structural form of bones, in that photograms resemble x-rays. I worked with this concept by photographing and scanning x-rays (as previously mentioned) lent to me by friends and the Launceston General Hospital. The subtle, textural structure of the bone is evident, reminiscent of Moore's drawings and Vesalius' etchings. To further examine these textural qualities, I made rubbings of bones, using black oil pastels and charcoal on newsprint paper, photographing and later scanning them. By turning the images into negative format (white bone on a black background), I created visually a sense of the bone's chalky, tactile physicality (Fig 56).

The following images (Figs 54-57) compare the textural and structural similarities of bone as expressed by Moore and Vesalius and with my own observations and images. These provide what is perhaps one of the primary, elemental languages of bones – the sense of their power as structures which is apparent even when separated from the contexts of the body.

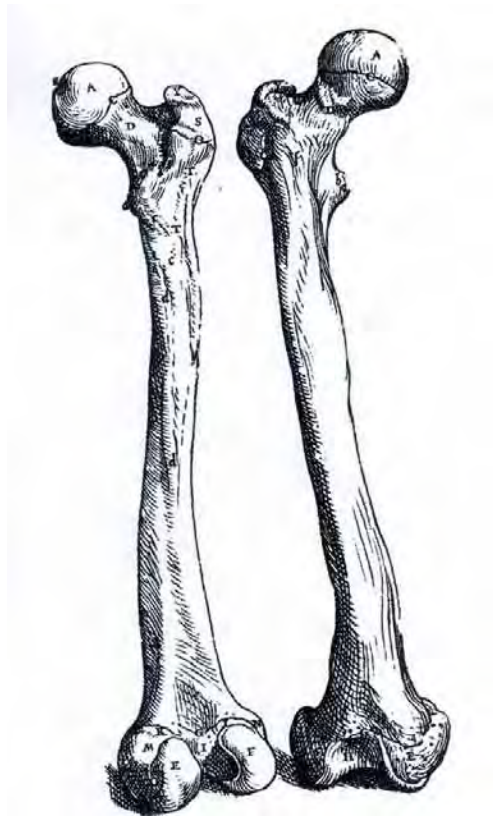


Fig 54
Vesalius
Woodcut 16th Century

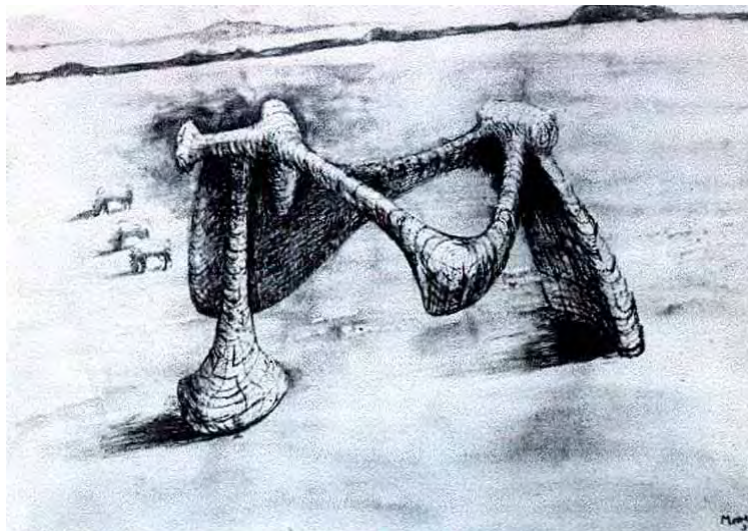


Fig 55
Henry Moore.
Sculptural Object in Landscape. 1939.
Pen and ink, crayon, watercolour.



Fig 56
Jo Pitchford.
Bone rubbing 2004.
Digital print from analogue negative.



Fig 57
Jo Pitchford
X-ray image 2005
Digital print from analogue negative.

The identity, definition and perception of bones will change according to the language disciplines (scientific, medical and anecdotal) used to describe them. These languages set bones into specific contexts and define how they are classified. Since I started my project, I have become highly aware of the multiplicity of languages that are formed according to the way in which objects are classified and displayed.

The systems of ordering, classification and display led me to the work of Christian Boltanski. He was born in Paris in 1944, starting his artistic career at age twelve in painting and drawing. Since the 1960s he has worked with the detritus of human experience, ranging from obituary photographs to old biscuit tins.⁸⁷ His work involves cataloguing and displaying photographs and objects that relate to his life story, both real and invented, including objects from his childhood and people's lives (Fig 58).



Fig 58
Christian Boltanski 1993
Venice Biennale 1938 – Venice Biennale 1993
Installations

His work deals with the past, the objects that signify this, the manner in which we tend to cling to our pasts, and the objects that remind us of the past. His

⁸⁷ <http://www.tate.org.uk/magazine/issue2/boltanski.htm> *Tate Magazine*. Issue 2, Nov. 2002, (12 July 2005)

installations of photographs and objects often labelled and displayed in cabinets, reflect this very powerfully, and indicate an almost obsessive manner of the process of collecting, cataloguing and arranging. He maintained that ‘photographs remain after death as a proof of existence’⁸⁸ – as of course do bones. Boltanski also created shadow installations, which in their own way reflect aspects of Nankin’s photograms and Beksinski’s images – a dark otherworld of dreamlike impressions fleetingly perceived. Bones, like photographs and shadows, can be considered as traces, all alluding to death, memory, identity, absence and loss.

Boltanski’s deliberate arrangements of objects and photographs are a conscious construct to express or impart his particular ideas or messages. The construction can be seen as a dialogue, involving Boltanski’s voice through his conscious choice in the organisation and arrangements of the objects, and the resulting voices expressed by the objects through their organised relationships. This concept is particularly relevant to my decision to use a contemporary version of an 18th century cabinet of curiosities (in the form of a shelf installation) to demonstrate the way in which the language of bones can be altered by context. Wealthy gentlemen set up cabinets of curiosities to complement their libraries. The acquisition of these cabinets demonstrated not just their collection of antiquities and natural objects, but also the fact that they were gentlemen (as only gentlemen could afford the establishment and upkeep of such amenities), and people of culture and learning with an interest in the natural sciences. The specimens were catalogued, ordered and displayed in an attempt to reduce all knowledge to an ordered system of hierarchies and relationships (Fig 59).

The cabinets, often room-sized, formed the basis for the natural history museums of the future. Similar cabinets are often now utilised by museums as storage facilities for smaller items, presenting constructed layers of information and knowledge, sorted and labelled, within established metanarratives. These cabinets image the objects, freezing them in time, much as a photograph does, for the viewer to peruse at their leisure. This correlation can be extended even further,

⁸⁸ Lynn Gumpert. *Christian Boltanski*, Flammarion, Paris, 1994, p 33

comparing the cabinets to early photographic equipment, both being the products of highly skilled cabinetmakers, both capturing and holding objects.



Fig 59
Cabinet of Curiosities

Tasmanian furniture designer and contemporary artist Patrick Hall created a contemporary version of the cabinet (Fig 60), entitled *Bone China* (2005), for the exhibition *Transformations: The Language of Craft* at the National Gallery of Australia.



Fig 60 Patrick Hall. *Bone China* 2005

The traditional domestic china cabinet inspired Hall's creation, and in an extension of this concept, the bones are made from domestic bone china sourced from Tasmanian beaches and rubbish tips. As bone china is a by-product of animal bones, Hall's installation connects the disparate elements of human, animal and domestic remnants. Displaying them in a quasi-domestic milieu creates a subtext that references the exploitation of live stock by-products, the result of the massive land clearances in 19th century Britain; which in turn fuelled immigration to Australia, many of these immigrants bringing their domestic china with them. Boltanski's work, the Cabinet of Curiosities, Hall's installation and my shelf installation evidence objects and photographs as engrams; reminders of what once was, and demonstrate how objects can be manipulated according to their relationships with other objects to create specific languages.

In the following and final chapter I expand on the conceptual and technical processes and thinking behind the evolution and creation of my visual work. I have sought the underlying essence and voice of bones' being through the process of image making. Examining the relationship of bones to the physical spaces they occupy, (which can range from burial sites to museums), their reality as objects and their significance as remnants from the past, revealed the mutability of their forms that is influenced by their associated contexts and languages. As my images evolved I began to discern a series of common threads of pattern and design that connects bones with other natural systems.

Chapter Five
What Bone Shall Speak for Me?
Seeking the Language of Bones through Image Making.

Versenyi wrote: ‘a work of art does not so much reveal what this or that individual thing is, as it discloses to us the essential nature and structure of a whole world.’⁸⁹

I interpret this world as embracing not only the everyday world in the contexts of real and historical time, but also in a metaphysical sense as described by Herbert Read in relation to Henry Moore’s sculptural forms: ‘behind the appearance of things there is some kind of spiritual essence, a force or immanent being that is only partly revealed in actual living forms.’⁹⁰ It was as I worked through the process of image making and experimenting with different techniques of depicting bones that I felt that I was beginning to discern a sense of this spiritual essence or essential nature of bones.

Subjective opinion (the eye of the beholder) forms a strong basis in the manner in which both images and skeletal remains are perceived. I have for some time considered bones to be objects of great beauty and the ultimate expression of perfection in their functional utility, with the added dimension of being messengers from the deep past. When I started my visual investigation I primarily sought to extract the formal elements of bone that constitute their utility and perceived beauty. I became increasingly fascinated by the multitude of associations my images of bones evoked, often surprising me with unexpected revelations and a broad range of responses to them by other viewers.

The first year of my project, working in the darkroom, was an intense period of exploration and experimentation, trialling and testing different methods and techniques of imaging bones to discover and extract an essence that could be

⁸⁹ Laszlo Versenyi. *Heidegger, Being and Truth*, Yale University Press, New Haven and London, 1965, p 92

⁹⁰ Herbert Read in *Henry Moore, Vol. 1, Sculpture and Drawings, 1921-1948*, David Sylvester (ed), Percy Lund, Humphries and Co Ltd, London, 1957, p xvii

construed as a language. Some of these experiments were quickly discarded as being visually inadequate as articulating language. Others, such as some of the photograms (Fig 61) and microscopic images (Fig 69) that I made in the first year of my project, remained as visually strong images that I included in the book as part of the final body of work.

I made many photograms of bones, which give the impression, similar to x-rays, of seeing into or through the bone. The different densities in the structure of bone result in images with subtle, tonal shadings where the bone is slightly less dense, and brilliant white highlights where the bone is thickest. Positioning the bones in a densely black background enhanced their ghostlike appearance, which allegorically references their allegorical nature and creates the potential for a variety of different narratives to be applied to them (Fig 61).

I also experimented with making photograms of bones layered in cloth to suggest the different strata inherent in their language. Adding photo chemicals (developer and fixer) onto the paper on which the photogram was exposed (Fig 62) created a suggestion of bodily organs or tissue. I wasn't satisfied with either the layered cloth or photochemical techniques. While I considered they added a certain depth to my visual research I didn't feel they expressed any form of language that I was seeking.

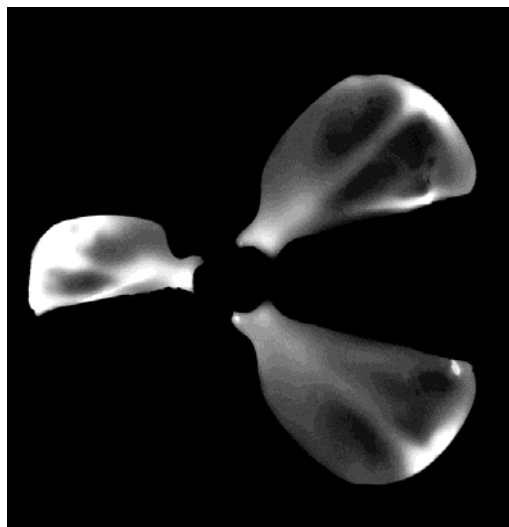


Fig 61

Jo Pitchford
Scapulae 2004 Photogram



Fig 62
Jo Pitchford
Untitled 2004
Chemogram/photogram

Another technique I experimented with was the layering of negatives, resulting in composites of superimposed images. I saw this as visually referencing the way in which memory and language are layered, and the layering inherent to the geological levels in which bones are often found. However, I felt these images also did not communicate, either conceptually or aesthetically, any sense of a language that suggested relationships to the fields (scientific, medical, archaeological or cultural) which I used to define the parameters of my research.

I began experimenting with close-up photographs of bones, cropping parts of the images to create separate entities quite detached from the original structure.

As I worked with these images I discovered a new and quite unexpected language evolving. This aspect first emerged when I created the *Landform Bones* 2005 (Figs 63 *a-c*), analogue images that I later scanned into digital format. The cropped bones suggested barren landforms that evoked an impression of a primeval or lunar landscape.

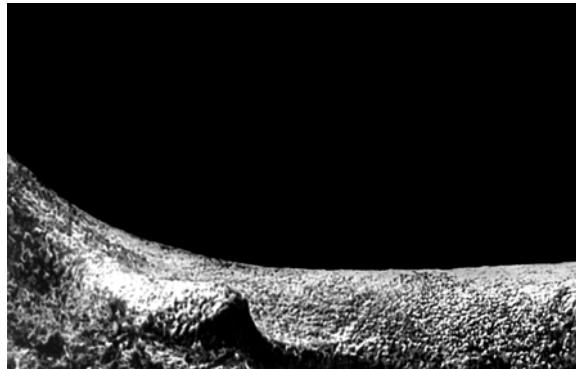


Fig 63 *a*

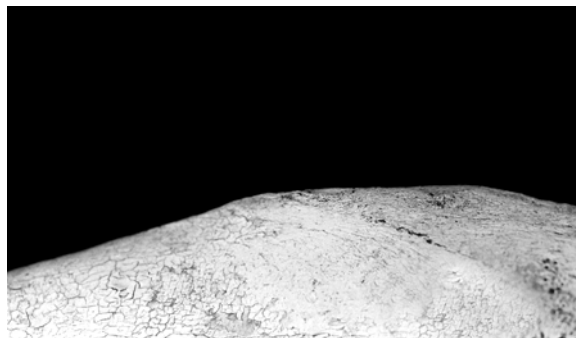


Fig 63 *b*

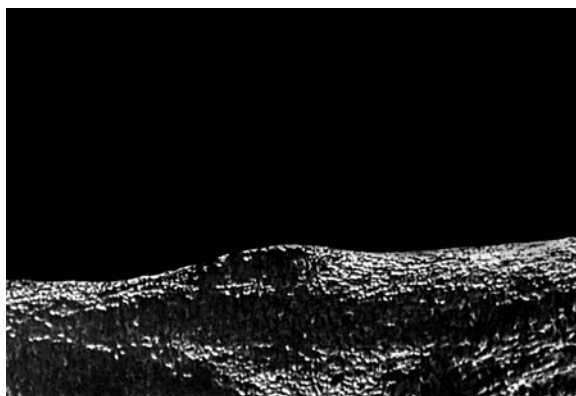


Fig 63 *c*
Jo Pitchford

Landform Bones 2005.

Digital prints from analogue negatives.

It was in these images that I began to discern the visual expression of the theory that the same traits are reproduced in all levels of reality⁹¹ as expressed by Fritjof Capra: 'all things are seen as interdependent and inseparable parts of this cosmic whole; as different manifestations of the same ultimate reality.'⁹² These images seemed to embody the concept that 'all is one,' the philosophy that all natural systems are connected to make up the greater whole. The following images (Figs 64, 65) also demonstrate this concept.



Fig 64
Monika Zechetmayr
Honeycomb Rock 2006
Photograph



Fig 65
Jo Pitchford
Eroded Bone 2006
Digital print

Troy Ruffels also reflected on the theory of interdependence, writing in a catalogue essay: 'the universe is multi-faceted and multi-dimensional, a shimmering mass of infinitely small and relationary particles and relationships.'⁹³ This was the point when I realised that a language of bones was emerging.

Further investigations involved making rubbings of bones, gleaned from knowledge of the practice of making rubbings of grave effigies and inscriptions,

⁹¹ http://en.wikipedia.org/wiki/Macrocosm_and_microcosm Wikipedia contributors, 'Macrocosm and Microcosm,' *Wikipedia, The Free Encyclopedia*, (7 October 2005)

⁹² Fritjof Capra. *The Tao of Physics. An Exploration of the Parallels between Modern Physics and Eastern Mysticism*, Flamingo, London, 1982, p 29

⁹³ Troy Ruffels. Catalogue essay, *A Precipitation in Time*, Devonport Regional Art Gallery, 2006

used by folklorists and genealogists to record inscriptions and funerary decorations.⁹⁴ Rubbing over the bone created a tactile sense of the surface of the bone, all the lines, clefts and ridges denoting the experiential history of the bone as emphatically (for those who can read them) as the ‘words scored upon a bone’ in Hope’s poem. The rubbings have a sense of being made quickly and with a certain vigour, giving them an energy and immediacy that is in contrast to the sense of stillness evidenced in the images of the actual bones (Fig 66). The immediate aspect of bone is less apparent in these images; rather they have become textured shapes. The complex nature of these images queries just what is being depicted and it is the visual ambiguity allied with the impression of energy and movement that is the reason I selected some, out of the many rubbings I made, to be included in my main body of work.



Fig 66
Jo Pitchford
Rubbing-Rib 2005
Digital print

To further extend my visual research, I photographed x-rays of bones. These images revealed the fundamental nature of bones – support systems that combine great structural strength allied with relative lightness, their tension of form

⁹⁴ <http://members.aol.com/TombView/rubbings.html> *How to do Gravestone Rubbings*. (8 June 2006)

contrasting with the flexibility of joints. The linear marks revealed in the x-rays were reminiscent of pen or charcoal drawings. Presenting the images in negative format (black on a white background) enhanced this sense of mark making. The images of the human knee (Fig 67) and the horse's knee (Fig 68) reflect Moore's sculptural forms, with echoes of Vesalius' woodcuts in the striations of the human knee x-ray.



Fig 67
Jo Pitchford
Knee x-ray 2005
Digital print



Fig 68
Jo Pitchford.
X – ray image of horse's knee 2005
Digital print from analogue negative.

Further investigative techniques involved taking photographs through a microscope (Fig 69). I crumbled some bone into tiny fragments and photographed them, using a cardboard cone that I made to cover both the camera and microscope lenses. I was not at all sure if this would work, therefore the resulting abstract forms were quite unexpected. They seemed to encapsulate mysterious tiny worlds, pulsating cells or systems (the microcosm mirroring the macrocosm). I selected the four most visually successful images from this experiment.

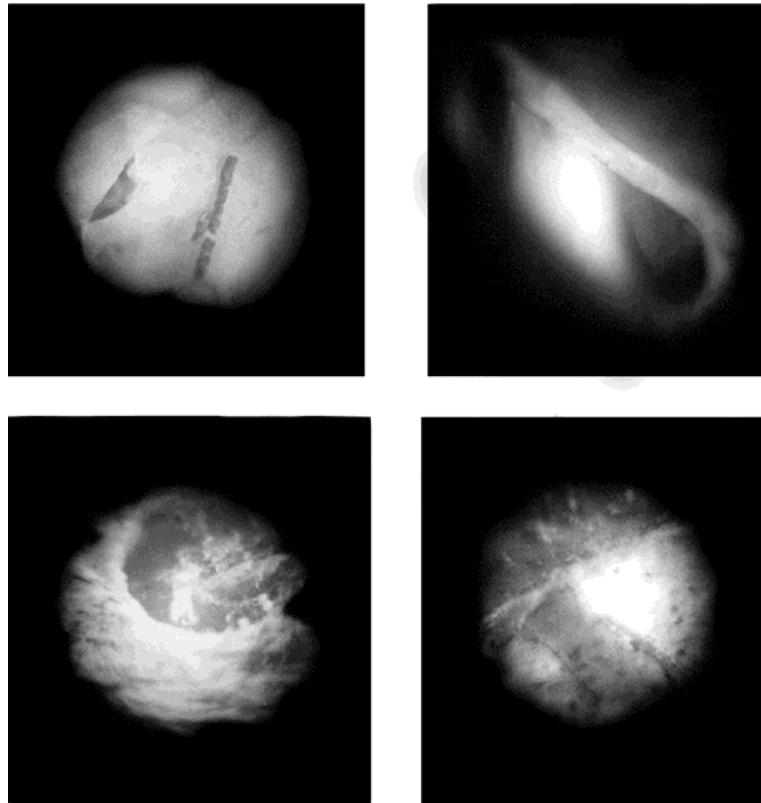


Fig 69
Jo Pitchford.
Microscopic images. 2004
Digital prints from analogue negatives.

The chemogram/photogram images, the layered negatives and the many photographs I took of individual bones all helped to inform my research. However, the images I considered successful were the cropped images (including the *Landform Bones*), the photograms, microscopic images and the x-ray and rubbing images. I saw in these images new languages emerging that referenced the common language of patterns and systems that are repeated throughout the universe. Cropping images – separating one part of the image from the original whole, removes the descriptive physical context of bone. The photograms, rubbings and microscopic images also remove the physical context of the bone. This changes the visual grammar, creating a different narrative and different sense of the bone, in much the same manner as the story written by the computer (see p 11) takes the sense of the story out of its logical context by the juxtaposition and combination of words, creating a new, if somewhat surreal narrative. This example also demonstrates the flexibility of both bones and language and how, while the same basic structures are maintained, the meaning can be altered

according to the manner in which the words are flexed or positioned, and in the case of the bone images, how they are created (for example rubbings), or manipulated (cropped). Selected images of each of these techniques are included, either in the book or wall mounted in the gallery, as part of my final thesis.

My visual research was interrupted at the beginning of 2005 when I realised that I had developed an extreme sensitivity to photo chemicals. I eventually recognised that the illnesses I was prone to for most of 2004 were associated with being in the darkroom and not as I thought, recurring bouts of the 'flu. I had to change from analogue to digital image making, embarking on a rather steep learning curve to become computer and Photoshop literate. My immediate reaction was a feeling of a huge sense of loss akin to grief, in that I could no longer work with analogue photography, a medium that had meant so much to me, and one I had enjoyed on a visual and physically tactile level. All my creative work had been done in the darkroom – the negative had only been the very beginning of my image making process. For some time I grieved for this loss of tactility, the sense of immediacy and the hands- on satisfaction of working in the darkroom. I felt much removed, both physically and creatively, from what I was doing when working on the computer, and was concerned how this would be reflected in my work. My darkroom practice had been part of the ritual of image making, and the loss of this ritual caused a hiatus in my creative, visual thinking, to the extent that I had problems making images that I felt satisfied with. I was also concerned that the bones' voice would be diminished or lost altogether, or that their language might be altered by the change in medium. This indeed did happen, but in a way that eventually I found exciting and intriguing. I discovered that the visual language of the images seemed to be changed, with the bones taking on the appearance of other entities or systems, with repeated patterns, from the microscopic to the cosmic seemingly revealed, forming new patterns or systems of language. The languages traditionally used to describe bones (medical, scientific) no longer applied. Probably because of my basic ignorance of computer technology, I considered these changes were perhaps caused by the technical differences between the interface of the camera lens and subject, and that of scanner, computer and subject, and therefore how objects are imaged. The subtle differences in how the bones appeared as objects and the languages they

began to express went beyond my intentions or expectations. I embraced these transformations and the new languages they offered me to interpret and work with. I took encouragement from these new aesthetic and conceptual challenges, and from an aphorism sent to me: ‘Resisting change is like holding your breath – if you succeed you die!’ – and an introductory elective unit in Photoshop.

As I reconciled the loss of the darkroom environment I continued to work with an analogue SLR camera and I scanned negatives, analogue prints and bones into the computer for further digital processing. I was also given a digital camera that I started to use in conjunction with my analogue SLR. As my work progressed and I became more familiar with the technology I began to achieve a level of satisfaction with my images.

The change to digital imagery involved further experiments with imaging techniques as I familiarised myself with the new medium. I found that scanning bones directly into the computer produced surprising results, and this is the point when I began to feel quite excited about the images I was making. I imagined (rightly or not) that the action of crossing the interface between the object, scanner and computer transformed the bone, seemingly to remove one essence of it and imposing or revealing another. An analogy can be drawn between this concept and those of photographs and holograms, which separate the image from the object,⁹⁵ and Fourier transforms. Fourier transforms are a mathematical formula for manipulating digital information, which is used to mask or isolate the frequency in a signal, whether that be an image or a sound – for example, removing extraneous background noise such as ‘white’ noise in radio transmissions.⁹⁶ It is used in image manipulation to find the edges of objects or built features in the environment, for example isolating all the straight lines in an image. I therefore hypothesized that through the interface of the computer, aspects of these techniques came into play, resulting in a mysterious alchemy in which a spectral essence of the physical bone was removed, altered or realigned and captured by the computer, resulting in the subtle visual differences between the

⁹⁵ Georgina Bruni. *You Can’t Tell the People. The Definitive Account of the Rendlesham Forest UFO Mystery*, Sidgwick and Jackson, London, 2000, p 358

⁹⁶ Bruni, pp 357, 358

image and the object bone. This theory is reminiscent of Balzac's views on photography and why he hated to be photographed. He believed all physical bodies to be made up of a series of ghostlike images, laid on top of one another. The act of taking a photograph, Balzac believed, removed one of these spectral layers from the body and transposed it to the photograph. Therefore, repeated exposures resulted in the loss of the very essence of life – a belief similar to that held by some early cultures that the act of having a photograph taken stole the person's soul.⁹⁷

Revealing the soul or essence of the bones through image making is also reflected in the theory expressed by the gypsy Melquiades: 'things have a life of their own. It is simply a matter of waking up their souls.'⁹⁸ Therefore, in this sense the object bone is woken up, and begins to speak with a multitude of voices. By drawing out the essence of the form, there is a sense of the bone leaving the original structure.

By transposing some of the scanned images into a negative format a visual illusion was created of having turned the bones inside out. The following image (Fig 70) evidences this sense of reversal, both visually (from positive to negative), and physically: the bone seems to show a membranous interior, reminiscent of the visceral fleshiness of an internal organ.

⁹⁷Geoffrey Batchen. *Burning With Desire –The Conception of Photography*, MIT Press, Cambridge, 1997, p 208

⁹⁸ Gabriel Garcia Marquez. *One Hundred Years of Solitude*, cited by Rebecca Solnit in *Once Removed, Portraits by J. John Priola*, Alfred A. Knopf, New York, 1995, p 121

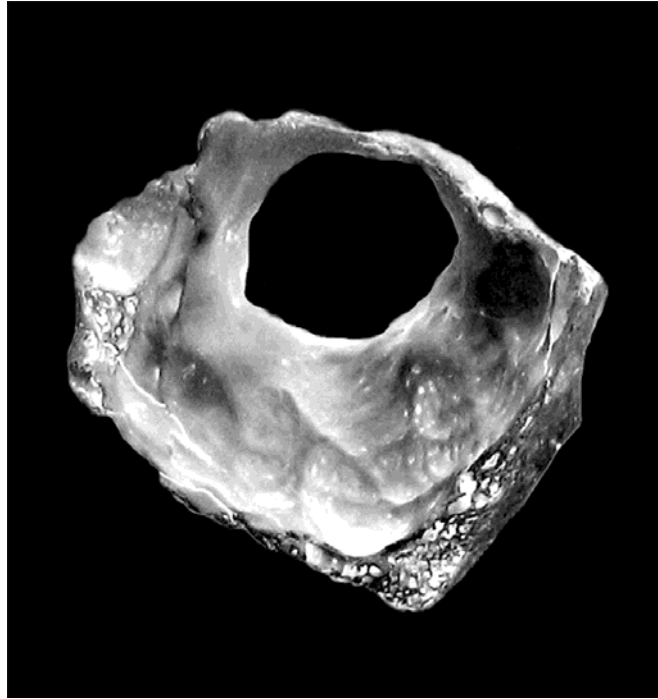


Fig 70
Jo Pitchford.
Negative Bone 2005.
Digital print

Placing the object on a dense black background makes reference to the technique J. John Priola used in *Once Removed* 1998. The isolated object floating in dark, undefined space coerces the viewer to examine the image closely and construe significance. I have used this technique with many of my images. Blossfeldt also presents the singularity of his plant forms in a bare background, inviting the viewer to examine closely the surface, texture, and particularly the form of the object. The following pairs of images (Figs 71, 72 and 73, 74) again demonstrate the commonalities of form and structure that are echoed in all natural systems – ‘the memory of Nature herself.’⁹⁹

⁹⁹ <http://ayjw.org/articles.php?id=760937> W.B Yeats. ‘Ideas of Good and Evil,’ in John Moore-Williams, *Awake Unsleping Fires: Speaking the Silent in W.B. Yeats* (18 July 2005)



Fig 71
J. John Priola
Candelabrum, 1995 Gelatin silver print.



Fig 72
Jo Pitchford
Flower bone 2006 Digital print

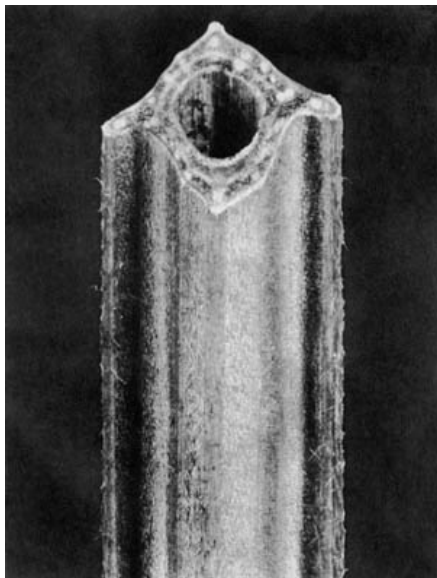


Fig 73
Karl Blossfeldt
Broad Bean: Cut Stem
Photogravure print

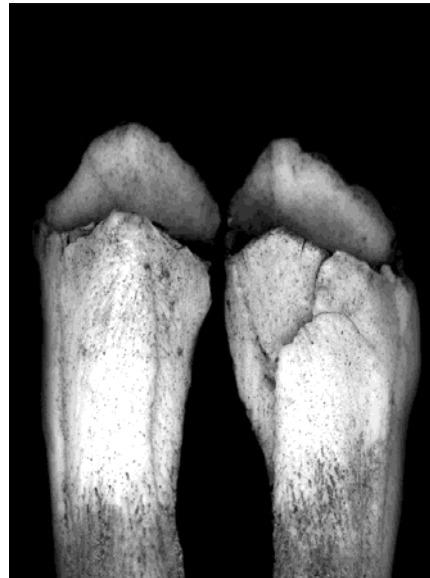


Fig 74
Jo Pitchford
Two 2006.
Digital print

As I continued to scan different bones, the fluidity of their morphologies became more apparent. Some appeared as fleshy organs (Fig 77), and different entities continued to evolve from the technique of deliberately selecting and cropping small pieces from larger forms and imaging them in a close-up format (as with the

Landform Bones). A bird's pelvis became an insect-like form that in a play on words I entitled *Etymology/Entomology* (Fig 76). Cropping a section of a bird's skull created the *Botanica* plant form – its shape similar to that of a plant's pistil and stamen (Fig 75).

Removing bones from any other visual or physical context changes their language just as the physical act of disarticulating a skeleton or removing bones from a geographical or physical location does (for example, a burial site). These techniques demonstrate how bones can be manipulated to create different languages, as language itself can be flexed to create new meanings that involve a variety of interpretations. These forms/objects have become as fluid and transposable as is language itself.



Fig 75
Jo Pitchford.
Botanica 2005 Digital print.



Fig 76
Jo Pitchford
Etymology /entomology 2005
Digital print



Fig 77
Jo Pitchford.
Bodily. Digital print.

When depicted as landscape forms or used as architectural elements (for example the construction at the Museum Giger Bar), bones speak of their underlying purpose as unifying forces that hold together and support systems. Often the very shapes of bones suggest their use for specific purposes, and therefore direct the languages that become associated with them (the femur, for instance, of a large animal can suggest a club). The shape of the bone in my image *Utility* (Fig 78) practically insists that it be grasped and used, its associated language being directed by the function its shape suggests. As an example of a cultural object on the shelf installation it alludes to tool manufacture and use.

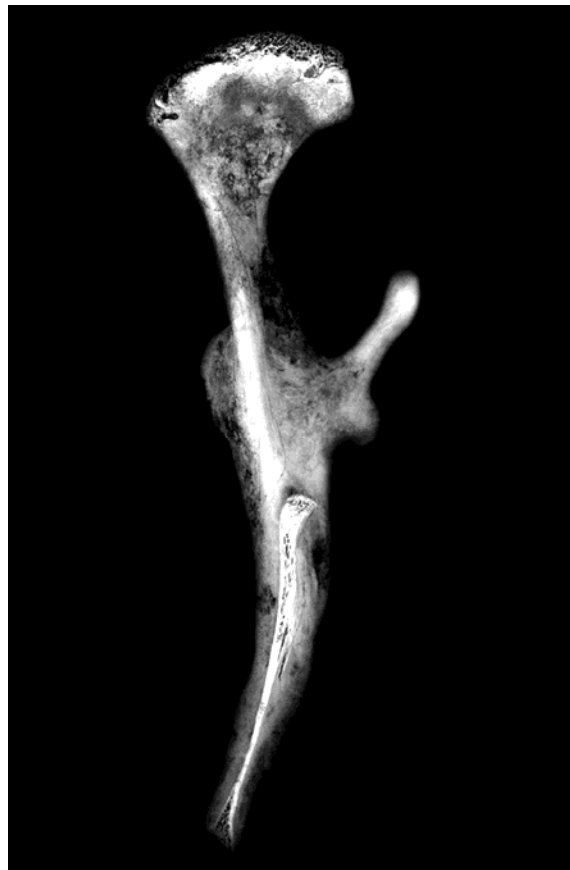


Fig 78
Jo Pitchford
Utility 2006
Digital print

The three different methods of interpreting bone based on the case studies (the Palaeolithic bone objects, the Day of the Dead Festival and the Sedlec Ossuary) are represented in the three components of my final exhibition – the wall mounted images, the book of images and the shelf installation of bones and other objects.

As with the case studies, these examples all involve the alteration of bones by their being adapted or changed, for example by carving, etching or incising as seen with the Palaeolithic bone objects, or by their association with other objects as in the case of the Day of the Dead skeletal forms, associated with symbolic objects such as food and flowers. The Sedlec Ossuary redirects the language of bones by the manner in which they are displayed, where the individual nature of the bones is subsumed by the sheer number of them on display.

The wall mounted images in the gallery are all examples of visual manipulation. This has been done by either by cropping the image or using an extreme close up of the bone, which creates an uncertainty about the nature of the object being depicted. This not only redirects the language associated with the bone/object, but creates a new narrative based on what the viewer assumes the object to be, for example as shown by the image *Vessel Bone* (Fig 79). Abstracted from the context of the whole bone, it appears as a vessel form, thereby redirecting its associated language from that of bone to that of container or receptacle, which also alludes to bones as carriers, or containers of scientific and cultural information.



Fig 79
Jo Pitchford
Vessel Bone 2006
Digital print

The images that I selected for hanging on the gallery walls were chosen because of their visual ambiguity, in that they have more than one possible interpretation. To paraphrase Gombrich, we tend to interpret and classify images based on our categories of experience, therefore we project on to unfamiliar or ambiguous objects or images, a shape that we know or recognise.¹⁰⁰ This trait, I feel epitomises what I see is the allegorical nature of the languages of bones. The image *Untitled #1* (Fig 80) references this, with the architectural elements and structural purposes echoing those of skeletal forms. Their shifting morphologies are further demonstrated as the bones appear to shed their structural rigidity and take on the appearance of soft tissues, bodily organs (Fig 77) or muscular tissue (Fig 81).

¹⁰⁰ E.H.Gombrich. *Art and Illusion. A Study in the Psychology of Pictorial Representation*, Phaidon Press, London, 1960. p 200

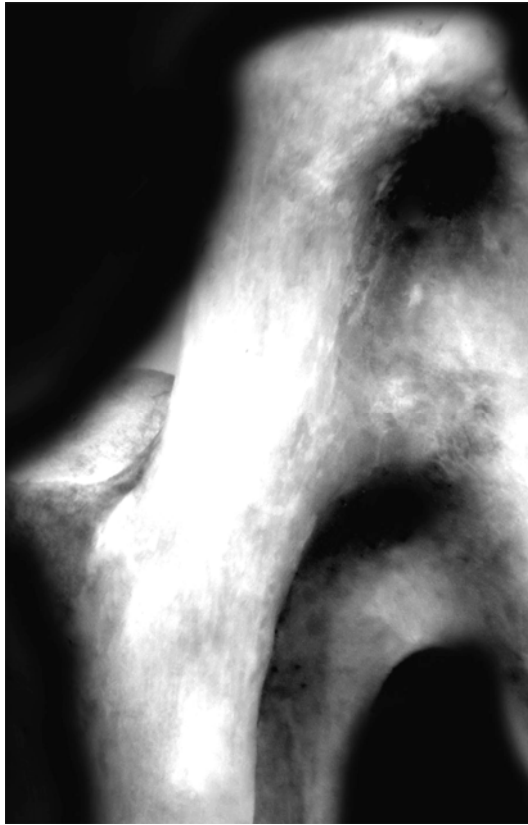


Fig 80
Jo Pitchford
Untitled #1 2006. Digital print

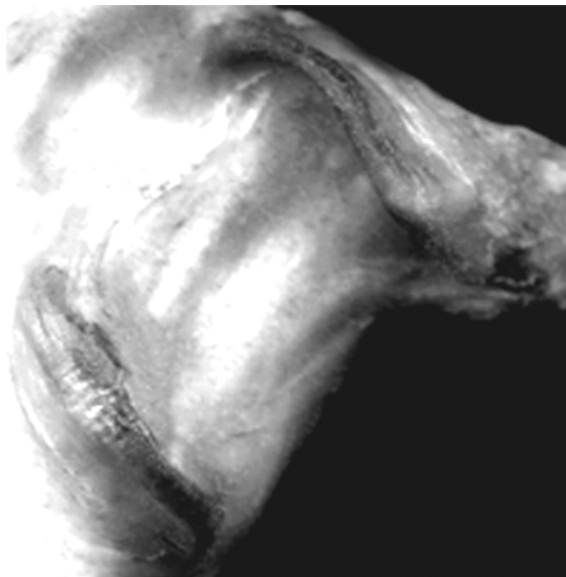


Fig 81
Jo Pitchford
Untitled #2 2006
Digital print

In a museum context, bones are dis-located from their pre-collected (original) environments, the austerity and silence of the museum space influencing their potential meaning. The bones' narrative is further guided and set into specific frames by the language of labelling. The display in general emphasises the incompleteness of the bones and their disconnection from their original bodily or cultural contexts. Therefore, I have created the shelf installation to demonstrate how the manner of display influences the manner in which objects are interpreted, thus directing their narrative. Shepherd iterates this concept in reference to the museum system of collating objects:

The socio-cultural aspects of collecting and the formal, aesthetic characteristics of display open the way for an investigation into how new relationships between objects are formed and how existing ones are strengthened and expanded on.¹⁰¹

I have not used labelling as I feel that this would too definitively set the parameters in which the objects are interpreted, as Gombrich wrote: 'it is the caption which determines the truth of the picture.'¹⁰² I therefore invite the viewer to construct their own narratives. The shelf installation is as consciously constructed as a museum display. This is my constructed language.

I have set the shelf installation in three asymmetrical, overlapping tiers on the gallery wall (Fig 82).

¹⁰¹ Carole Shepherd. 'Lieux de Memoire: The Object, the Artist and the Museum,' Paper presented at *Rhapsody 21C–The Future of University Museums and Art Galleries in the new Century*, Academy of the Arts, Launceston, Tasmania, 25-27 May 2005

¹⁰² E.H. Gombrich, p 59



Fig 82
Shelf Installation
 Jo Pitchford
 2007

The three tiers of the shelves reference bones in relation to cultural practice, scientific investigation and as specimens or collections. Metaphorically the shelves can be seen as representing the structure and layering of memory, narrative, geological time and history. The overlapping format of the shelves alludes to the way in which narrative is developed, one story stimulating and connecting to another as a flowing discourse. As a structured system the shelves allude to the historical memories carried in the bones, and the asymmetrical configuration refers to the manner in which memories may be ordered in the consciousness - layered, overlapping and merging. The shelves also reference personal objects as memory devices. I have deliberately ordered the shelf display to influence how the objects will be viewed and interpreted according to their relationships to each other. The top and middle shelves reference cultural practice and scientific investigation. The third and bottom shelf alludes to both these practices by displaying bones as specimens and a collection. Some of the bones have been adapted or changed in one form or another, referencing the historical practise of bones being altered to form tools, weapons or ornaments. This demonstrates how even sometimes minor alterations change the way in which

bones are interpreted, which redirects their languages and associated narratives. For example, on the top shelf the curved stingray tail bone associated with the scapula brings to mind the shape of a ship's hull and sail, and by extension leads to thoughts of sea faring and voyages of discovery. The little bone with an added hank of hair becomes either a toy or a ritual/fetish object, and the addition of an eye turns the weathered piece of bone into an animal's head. These impressions are helped by the shape of some bones that urge the eye and mind to see them as other things, with minor alterations enhancing these illusions, as Gombrich stated: 'expectation created illusion'¹⁰³ (Fig 83).



Fig 83
Animal Head and Fetish object
Jo Pitchford
2007

The middle shelf relates to scientific investigation; however some of the objects on the top shelf could also belong in this category – for example the stone scraper tool, which is as much a cultural object as it informs scientific knowledge. Again, the association of objects directs interpretation. The placing of actual and created fossils (the photographic print of a vertebrae on limestone) with bones implies for instance that the bones are old, when this not actually the case. However the similar shapes of bird skulls and shells alludes to scientific evidence of a common ancestor shared by all living organisms. Notation documents scientific research

¹⁰³ E.H. Gombrich, p 171 He was making reference to the spoken word, based on his experiences as a collator of radio broadcasts during World War Two; however the mind will also make a presumptive leap to complete a visual impression, based on known and recognised shapes.

and the placement of the bone on the inkwell alludes to this and by implication the language that is used to describe scientific research and discovery. The provision of a small magnifying glass urges a closer investigation of the smaller objects (Fig 84). The old bottles make reference to the collecting and preserving of specimens, which leads to the third and bottom shelf.



Fig 84
Shelf objects – Scientific Investigation
Jo Pitchford
2007

The third shelf reflects both scientific investigation and cultural practice. The bones here constitute specimens in the scientific sense, referring to the use of specimens as the reference points that instigate and fuel research. They also constitute a collection, a compilation of similar objects that indicate an interest in a particular subject or follow a theme. This collection also enables the viewer to see in the primary state some of the bones that are imaged in the book. (The shelf is located diagonally 340 cm from the book, making it possible to easily compare the images in the book to the specimens on the shelf: Fig 85). Placing them in white boxes on a black background echoes the format of the book (Fig 86).

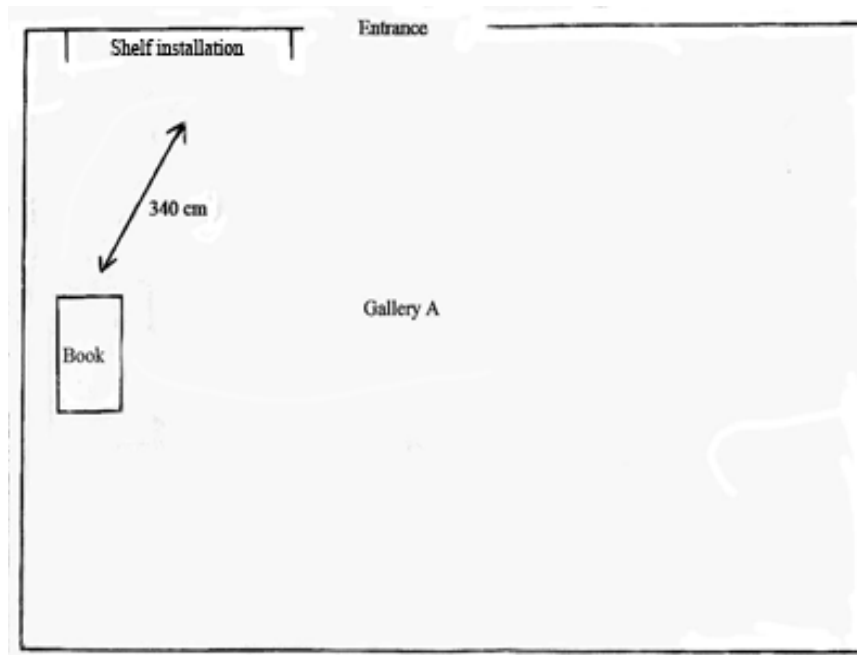


Fig 85
Gallery Floor Plan



Fig 86
Specimen bones- lower shelf
Jo Pitchford
2007

Although the images in the book have not been manipulated, the bones appear quite different to the original specimens. This demonstrates again how they become altered by their transition through the medium of photography and the computer. Isolated from any associated contexts, the images in the book and the

specimen bones invoke a contemplative response, inviting the viewer to articulate their own language or narrative in response to the objects/ images.

I have chosen to light the shelves to create shadows of the objects (Fig 87). The shadows reference memory and the elusive nature and interpretation of the language of bones, shadows being as ephemeral and intangible as the language itself. The shadows give the effect of extending the boundaries of the shelves as the objects seemingly flow off the edges onto the floor and walls. The shadows represent how the perception of the bones/objects is affected by the fluidity of the language applied to them and the narrative structure created around them.



Fig 87
Shelf shadows
Jo Pitchford 2007

As the viewer moves closer to the shelves their shadow is imposed onto and overlays the objects. This references the manner in which humanity imposes meaning through the application of language. The shadow intensity of the viewer varies from shelf to shelf. The top shelf of cultural objects is on the same level as the viewer and casts a softer shadow, suggesting a more intimate involvement with the objects. As the viewer stoops to examine the second and third shelves their shadow becomes stronger, indicating a more intense examination and perusal of the objects. The act of stepping up to the shelves immediately involves the viewer with the objects as their shadow intermingles with the shadows of the

objects, drawing the viewer into the installation and creating a connection with the bones/objects (Fig 88).

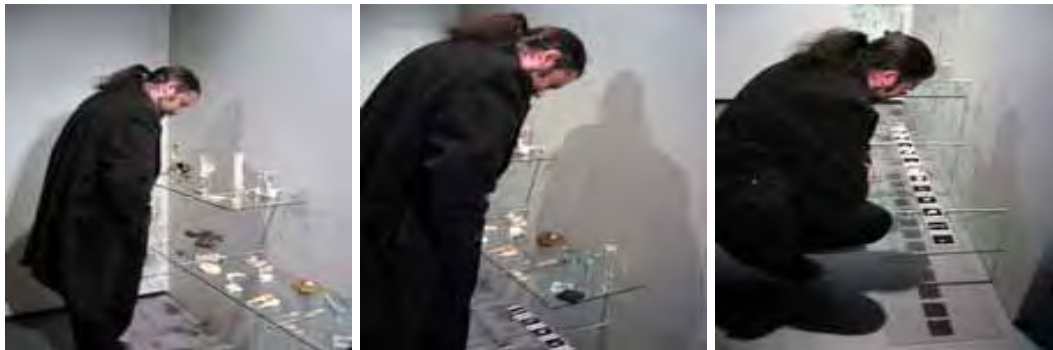


Fig 88
Viewer shadow
2007

The idea for the book of images is based on 18th century specimen books (Fig 89). These illustrated the practice of recording scientific information, in the form of drawings and paintings, or the pressing and preserving of flowers and insects in order to create a visual record that validated new botanical or zoological discoveries.



Fig 89
Specimen book.
John Coakley Lettsom, *The Naturalist's and Traveller's Companion, containing Instructions for Collecting & Preserving Objects of Natural History*, 2nd ed, 1774.

Books, like bones, can survive after the creator's/owner's death, continuing as a reservoir of knowledge for those who can read them. Each bone appears as a single entity on its own page, yet a larger narrative emerges as the pages are turned. Together the pages of the book create a cohesive whole – just as a skeleton is the sum of its parts. The book could also be compared to a palimpsest, a composition of layers that can be peeled back revealing the next, underlying image. The images themselves imply the potential of stories or meaning that lie below the surface, awaiting interpretation or articulation by the viewer. The book also has connotations with time in the sense that the layering of the pages is analogous to the layers of historical time in the archaeological record, where of course discovered bones remnants become collections of specimens that facilitate study and research. The book is a collection of bones as specimens, as a book itself is a collection – of ideas, images, information or a record – with narrative, whether explicit or implied as an integral part. Here the images exist as prompts to language; a spontaneous narrative encouraged as the viewer journeys through the book. Each journey will be a personal one, each individual 'owning' the book, by creating their own narratives (and no two narratives will be alike) in response to the images. The languages evoked here will be as personal and as varied as the individual's response

The use of the title 'What bone shall speak for me?' on the tissue paper of the first and last pages of the book reflects the questioning manner in which I approached my project. The large font of the title page represents a direct question – the beginning of the investigation. The smaller font on the last page is the quiet voice that pleads for remembrance after death – a narrative that will validate and perpetuate the evidence of an individual's existence (Figs 90 *a-c*).

I also consider the first image in the book of the three aspects of the dead bird (Fig 91) as representing a dialogue – a tête à tête (or a tête à trois?) – a visual statement of the question: 'what bone shall speak for me?' The last image, that of three aspects of the bone castanets (Fig 92) spells out (with a little imagination) "I can." This was not a conscious creation on my part, but an example perhaps of my subconscious working to assist the bones in creating a language, and I feel, an appropriate image with which to finish the book.

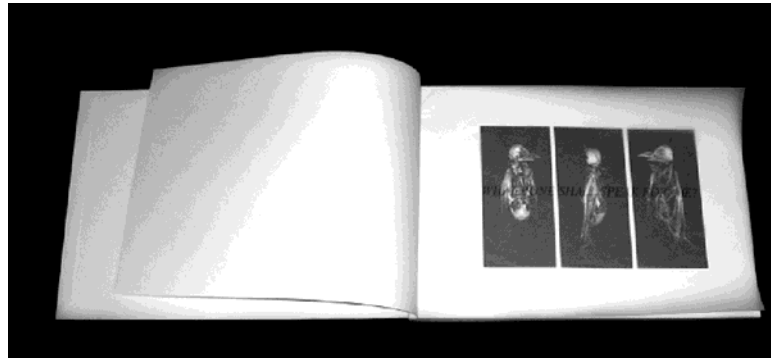


Fig 90 a-c
What Bone Shall Speak for Me?
 Specimen Book 2006
 Digital print.

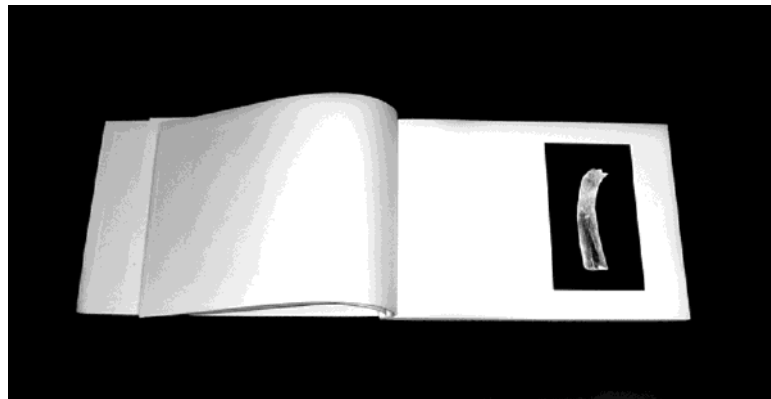


Fig 90 b

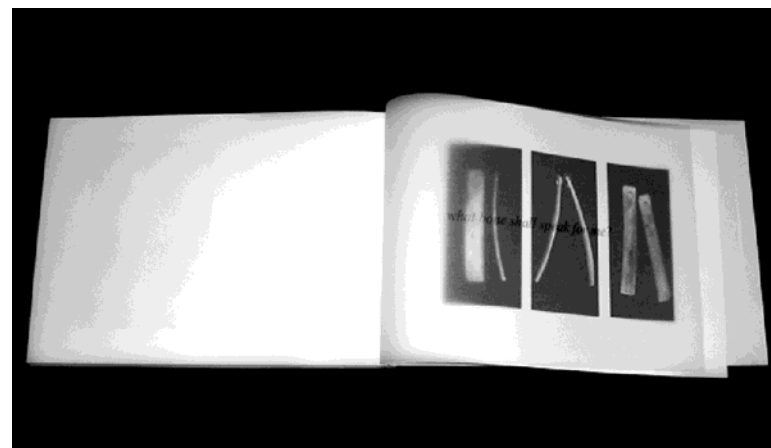


Fig 90 c

The wall mounted images, the book and the installation that form the body of this exhibition demonstrate the multiplicity and mutability of the language of bones, revealing bones as entities that can be appreciated for their singular purity, beauty

of form and structure and their inherent vitality and energy as eternally mutable communicators.



Fig 91
Jo Pitchford
Dialogue 2006
Digital print



Fig 92
Jo Pitchford
"I Can" 2006
Digital print

In Conclusion.

Susan Sontag notes that 'to photograph confers importance – the tendency inherent in all photographs is to accord value to their subjects.'¹⁰⁴ Using photography as the primary source for making my images, I have brought bones into focus as valuable significant objects, separated from any physical or cultural contexts that predetermine their interpretation, and revealed an accumulation of new voices. Herbert Read puts this into context:

Once the forms found in nature are transferred to the plastic world of art they are subject to the principle of metamorphosis by which they are perpetually renewed. The instant these shapes (organic forms) invade the space and materials specific to art, they acquire an entirely new value and give rise to entirely new systems.¹⁰⁵

The plasticity of photographic and digital media has provided an ideal medium with which to explore and interpret what is essentially the plasticity of the languages associated with bones. I feel that my project contributes to the contemporary art field unique interpretations of the way in which skeletal remnants are perceived regarding the issues of personal, public, cultural and historical identity. I feel that the manner in which I have presented bones in the form of images and as objects has brought them out from the relative obscurity and often highly technical, specialised languages of the scientific, medical and archaeological disciplines. The case studies on how bones have been and are still used and manipulated to serve a variety of scientific, cultural and personal purposes, as explained in Chapter Three of this exegesis, has guided the manner in which I have chosen to explore and portray bones. Depicted as objects they have been freed from their associations with the body and the subtext of death and decay, which allows different languages to be formed in response to the images. My images have revealed not only the fundamental perfection of bones as structural elements, but also demonstrated their plasticity, in that their meanings can be renewed and reshaped by the languages used to describe and interpret them. I acknowledge their primary significance however, is as evidence traces in

¹⁰⁴ Susan Sontag. *On Photography*, Dell Publishing Co. New York, 1977, p 28

¹⁰⁵ David Sylvester, p xxii.

the fossil record, forming the foundation of all knowledge of the evolution of vertebrates – including humans. Without these traces, the cupboard of knowledge would be bare indeed.

As fossils and remnants from the archaeological record, objects of diagnosis in the scientific and medical disciplines, as ritual or religious objects, and as museum specimens, they all have specific and often specialised languages attached to them. However, one language realised through my presentation of bones as images and specimen objects is their subtext as a microcosm that mirrors the forms of the wider realm of the macrocosm. Each bone is a complete world in itself, its DNA carrying the evidence of the single ancestor of all living organisms. Other forms in nature echo their very shape and structure. Many of these are imitated in man-made structures because of their essential utilitarian perfection and strength.

The many and varied cultural languages, with all the diversity and subjectivity that these imply, further reshape the concept of bones by the languages applied to them through different arts practices, where in the plasticity of this world, as Read states, renewal and regeneration is a constant. There is the potential to create myriad languages from and through bones, by manipulation or alteration, to communicate any desired message or concept.

The three components of my project in some respects reflect the three case studies examined, in that they all encompass the alteration of bones through one form of manipulation or another which in turn stimulates language to be articulated in response to them. However, in summarizing I have realised that it is not possible to elucidate or define a single, archetypal language (apart from that contained in their DNA) of bones. As demonstrated by the case studies and the outcome of my project, the interpretation of bones is wholly dependent on how they are altered or the contexts they are placed in. This significantly alters their languages and how their meanings are decoded. The three case studies, my images, the book and the shelf installation demonstrate how inconsistent, flexible and subjective the language of bones can be, their language being regenerated, distorted or altered by cultural connotations or the deliberate visual, physical or contextual

manipulation. The physical structure of bones is as formal as the grammatical structure of language and yet also as mutable, ambiguous and as fluid as language can be. Humankind creates and articulates the silent languages of bones. We are the storytellers, the ones who invest bones with meaning and create the narratives that drive the perceptions of their physicality and metaphorical essence.

*I have no history but the length of my bones.*¹⁰⁶

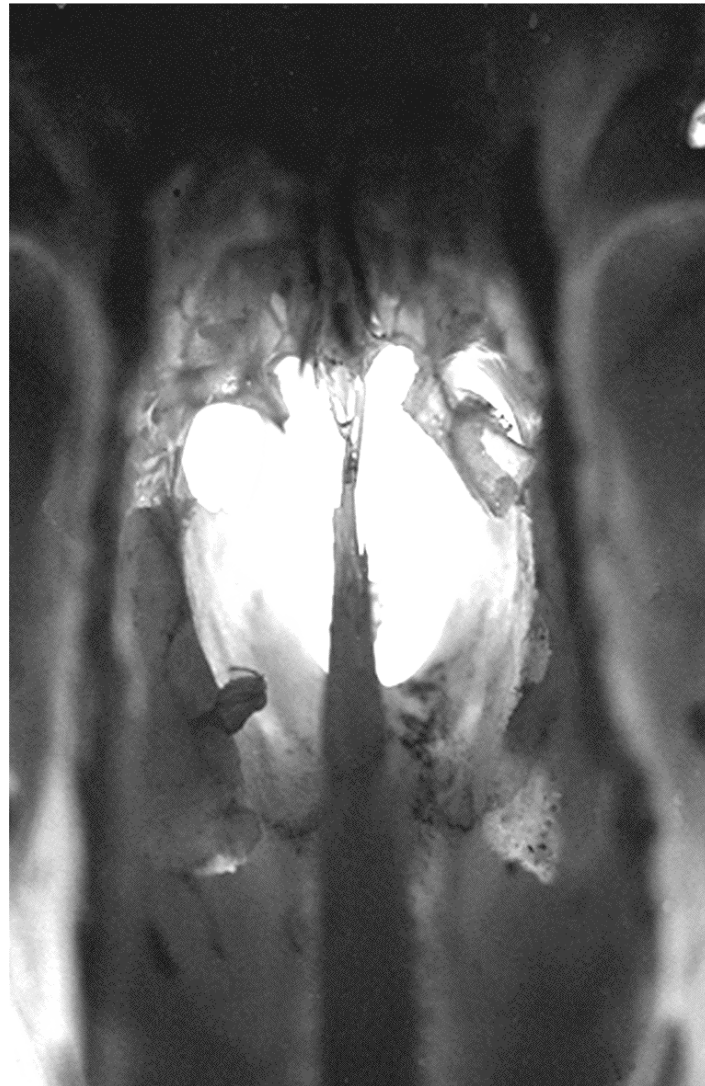


Fig 93
Jo Pitchford
Plato's cave? (Skull interior) 2005
Digital print from analogue negative

¹⁰⁶ <http://www.worldofquotes.com/author/Robin-Skelton/1/index.html> (17 November 2005)

Bibliography

Texts.

- Ackling, Roger. *From Art to Archaeology*. South Bank Centre, 1991, Coracle Press, London. 1991.
- Alexander, R. McNeill. *Bones: The Unity of Form and Function*. Weidenfeld and Nicolson, London. 1994.
- Baddeley, Alan D. *The Psychology of Memory*. Basic Books, Inc. Publishers, New York, 1976.
- Bahn, Paul. Consultant ed. *Written in Bones*. Quintet Publishing Ltd. London. 2002.
- Barfield, Owen. *History in English Words*.(1953), Eerdmans, Grand Rapids, MI, (rev edit), 1967.
- Baring, Anne & Cashford, Jules. *Myth of the Goddess. Evolution of an Image*. Penguin Books, Harmondsworth. 1991.
- Barthes, Roland. *Camera Lucida. Reflections on Photography*. Vintage. Random House, London. 2000.
- Barthes, Roland. *Mythologies*. Hill and Wang, New York. 1957.
- Batchen, G. *Burning With Desire –The Conception of Photography*. MIT Press, Cambridge. 1997.
- Baudrillard, Jean. *Art and Artefact*. Sage Publications, London. 1997.
- Baudrillard, Jean. *The Illusion of the End*. Pality Press, Cambridge. 1994.
- Benjamin, Andrew. *Art, Mimesis and the Avant-Garde. Aspects of a Philosophy of Difference*. Routledge, London. 1991.
- Berger, Lee R. & Hilton-Barber, Brett. *In the Footsteps of Eve. The Mystery of Human Origins*. Adventure Press, National Geographic, Washington. 2000.
- Bordas, Thierry. *Celtic Mythology*. Grange Books, Rochester. 2004.
- Boyne, Roy. *Subject, Society and Culture*. Sage Publications, London. 2001.
- Brown, J.A.C. *Pears Medical Encyclopaedida*. Pelham Books, London. 1965.
- Bruni, Georgina. *You Can't Tell the People. The Definitive Account of the Rendlesham Forest UFO Mystery*. Sidgwick and Jackson, London. 2000.

- Bryson, Bill. *Mother Tongue. The English Language*. Penguin Books, London. 1990.
- Cadava, Eduardo. *Words of Light. Theses on the Photography of History*. Princeton University Press, Princeton. 1997.
- Cadbury, Deborah. *The Dinosaur Hunters*. HarperCollins Publishers, London. 2001.
- Capra, Fritjof. *The Tao of Physics. An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. Flamingo, London. 3rd edit. 1982.
- Carmichael, Elizabeth & Sayer, Chloe. *The Skeleton at the Feast. The Day of the Dead in Mexico*. British Museum Press, London. 1991.
- Casey, Edward S. *Remembering: A Phenomenological Study*. Indiana University Press, Bloomington, Indiana. 1987, 2000.
- Cassiman, Bart, Ramael, Greet, & Vande Veire, Frank. (eds). *The Sublime Void. On the Memory of the Imagination*. Koninklijk Museum voor Schone Kunsten. 1993.
- Cassirer, Ernst. *Language and Myth*. Constable and Co. London. 1946.
- Causey, Andrew. *Paul Nash's Photographs. Document and Imagery*. Tate Gallery Publications Department, London. 1973.
- Chatters, James C. *Ancient Encounters. Kennewick Man and the First Americans*. Simon and Schuster, New York. 2001.
- Cohen, Gillian, Eysenick, Michael W, & Le Voi, Martin E. *Memory. A Cognitive Approach*. Open University Press, Milton Keynes & Philadelphia. 1988.
- Crow. David. *Visible Signs*. Ava Publishing SA. Switzerland. 2003.
- De Concini, Barbara. *Narrative Remembering*. University Press of America. 1990.
- Du Gay, Paul, Evans, Jessica & Redman, Peter. eds. *Identity-A Reader*. Sage Publications Ltd. London. 2000.
- Duncan, David Ewing. *The Calendar*. Fourth Estate Ltd. London. 1998.
- Eco, Umberto. *Semiotics and the Philosophy of Language*. The MacMillan Press, London. 1984.
- Eisenberg, Ronald L. *Radiology. An Illustrated History*. Mosby Yearbook Inc. St. Louis. 1992.

Evans, Jessica. *The Camera Work Essays: Context and Meaning in Photography*. Rivers Oram Press, London. 1997.

Finch, Christopher. *Pop Art*. Studio Vista Publishers, London. 1958.

Forty, Sandra. *Symbols*. Thunder Bay Press, San Diego. 2003.

Freeman, Mark. *Rewriting the Self: History, Memory and Narrative*. Routledge, London. 1993.

Goldberg, Kathy E. *The Skeleton: Fantastic Framework*. US News Books, Washington. 1982.

Gombrich, E.H. *Art and Illusion. A Study in the Psychology of Pictorial Representation*. Phaidon Press, London. 1960.

Gooding, Mel & Furlong, William. *Song of the Earth. European Artists and the Landscape*. Thames and Hudson Ltd. London. 2002.

Gray, Henry. *Gray's Anatomy*. Constable & Robinson Ltd. London. 2002. Hunter, Ian M. L. *Memory*. Pelican Books Ltd. Harmondsworth. 1972.

Gumpert, Lynn. *Christian Boltanski*. Flammarion, Paris. 1994.

Harris, Roy. *The Language Myth*. Gerald Duckworth & Co. Ltd. London. 1981.

Howe, Michael J. A. *Introduction to Human Memory. A Psychological Approach*. Harper and Rowe, New York & London. 1970.

Jackson, Beverley. *Splendid Slippers. A Thousand Years of an Historic Tradition*. Ten Speed Press, Berkeley. 1997.

Jakobson, Roman. *On Language*. Waugh, Linda R. & Monville-Burstion, Monique (eds). Harvard University Press, Cambridge, Mass. & London. 1990.

Janssens, Paul A. *Palaeopathology. Diseases and injuries of Prehistoric Man*. John Baker (Publishers) Ltd. London. 1970.

Johanson, Donald & Edgar, Blake. *From Lucy to Language. Central Issues of Paleoanthropology*. George Weidenfeld & Nicolson Ltd. London. 1996.

Johnson, Ellen H. *Modern Art and the Object. A Century of Changing Attitudes*. Harper & Rowe, New York, London. 1976.

Kemp, Martin & Wallace, Marina. *Spectacular Bodies. The Art and Science of the Human Body from Leonardo to Now*. University of California Press, Berkeley. 2000.

- Kemp, Martin. *Visualizations. The Nature Book of Art and Science*. Oxford University Press, Oxford. 2000.
- Koff, Clea. *The Bone Woman*. Hodder Headline, Australia Pty Ltd. Sydney. 2004.
- Kuchler, Susanne, & Melion, Walter (eds). *Images of Memory – On Remembering and Representation*. Smithsonian Institution Press, Washington & London. 1991.
- Leach, Maria. *Funk and Wagnell Standard Dictionary of Folklore, Mythology and Legend*. Funk and Wagnell, New York. 1972.
- Leeming, David. *Myth: A Biography of Belief*. Oxford University Press, Oxford. 2002.
- Reinhold, Meyer. *Past and Present –The Continuity of Classical Myths*. Hakkert, Toronto. 1972.
- Leppart, Richard D. *Art and the Committed Eye: The Cultural Functions of Imagery*. Westview Press, Boulder Co. 1996.
- Leroi-Gourhan, Andre. *Treasures of Prehistoric Art*. Harry N. Abrams, New York. n.d. (1967?)
- Lewin, Roger. *Bones of Contention. Controversies in the Search for Human Origins*. Simon and Schuster, New York. 1987.
- Lippard, Lucy R. *Over/ay: Contemporary Art and the Art of Prehistory*. Pantheon Books, New York. 1983.
- Malcom, Norman. *Memory and Mind*. Cornell University Press, Ithaca & London. 1977.
- McCauley, Robert N. *Bringing Ritual to Mind- Psychological Foundations of Cultural Forms*. Cambridge University Press, New York. 2002.
- Miller, Hugh. *Secrets of the Dead*. Channel 4 Books, London. 2000.
- Neumann, Erich. *The Archetypical World of Henry Moore*. Pantheon Books Inc. New York. 1959.
- Newton, Stella Mary. *Health, Art and Reason. Dress Reformers of the 19th Century*. John Murray Ltd. London. 1974.
- Olson, David R. & Torrance, Nancy. *Modes of Thought. Explorations in Culture and Cognition*. Cambridge University Press, New York. 1996.

- Oppenheimer, Stephen. *Out of Eden. The Peopling of the World*. Constable and Robinson Ltd, London. 2004.
- Park, Michael Alan. *Biological Anthropology*. Mayfield Publishing Co. London. 1996.
- Prag, John & Neave, Richard. *Making Faces. Using Forensic and Archaeological Evidence*. British Museum Press, London. 1997.
- Prince, Gerald. *Narratology. The Form and Functioning of Narrative*. Mouton, Berlin. 1982.
- Priola, J. John, Grundberg, Andy & Solnit, Rebecca. *Once Removed: Portraits By J. John Priola*. Arena Editions, Santa Fe, New Mexico. 1998.
- Rieser, Dolf. *Art and Science – Modes of Thinking, Visual Perception and Artistic Vision, Art Forms in Nature and the Unconscious Mind*. Studio Vista, London. 1972.
- Rinks, R. P. *Myth and Allegory in Ancient Art*. (Warburg Institute, 1939), Kraus Reprint, Nendeln, Liechtenstein, 1968.
- Rosenburg, Harold. *The Anxious Object. Art Today and its Audience*. Horizon Press, New York. 1964, 1966.
- Rubin, David C. *Remembering our Past. Studies in Autobiographical Memory*. Cambridge University Press, Cambridge. 1995.
- Saunders, J.B. de C.M. & O'Malley, Ch.D. *The Illustrations from the Work of Andreas Vesalius of Brussels*. The World Publishing Co. Cleveland & New York. 1950.
- Schick, Kathy D. & Toth, Nicholas. *Making Silent Stones Speak. Human Evolution and the Dawn of Technology*. Simon & Schuster, New York. 1993.
- Searleman, Alan & Herrmann, Douglas. *Memory from a Broader Perspective*. McGraw-Hill Inc. New York. 1994.
- Seboek, Thomas A. *A Sign is just a Sign*. Indiana University Press, Bloomington & Indianapolis. 1991.
- Sircello, Guy. *Mind and Art*. Princeton University Press, Princeton, New Jersey. 1972.
- Slaatte, Howard A, & Sendaydiego, Henry. *The Philosophy of Martin Heidegger*. University Press of America, Lanham, London. 1984.

- Smart, Ninian. *Dimensions of the Sacred, An Anatomy of the Worlds Beliefs*. Fontana Press, London. 1997.
- Snell, Richard S. & Wyman, Alvin C. *X-ray images. An Atlas of Normal Radiographic Anatomy*. Little, Brown, Boston. 1976.
- Solomon, Jack. *The Signs of Our Times. Semiotics: The Hidden Messages of Environments, Objects and Cultural Images*. Jeremy P. Tarcher, Los Angeles. 1988.
- Sontag, Susan. *On Photography*. Dell Publishing Co. New York. 1977.
- Stafford, Barbara Maria. *Symbol and Myth. Essay on Absolute Signs in Art*. University of Delaware, New Jersey. 1979.
- Stanbury, Peter & Holland, Julian (eds). *Mr. Macleay's Celebrated Cabinet*. The Macleay Museum, University of Sydney, Sydney. 1988.
- Strachan, W.J. *Henry Moore-Animals*. Aurum Press Ltd. London. 1983.
- Summers, Leigh. *Bound to Please. A History of the Victorian Corset*. Berg, Oxford & New York. 2001.
- Sykes, Brian. *The Seven Daughters of Eve*. Bantam Press, London. 2001.
- The Readers Digest Great Encyclopaedic Dictionary*. The Readers Digest Association, Sydney, Wellington & Oxford University Press, London. 1965.
- Sylvester, David. ed. *Henry Moore. Sculpture and Drawings. 1921- 1948*. Percy Lund, Humphries & Co. Ltd. London. 1959.
- Taschen. *HR Giger*. Hohenzo1lernring. 53, D-50672 Koln. 2002.
- Taussig, Michael. *Mimesis and Alterity. A Particular History of the Senses*. Routledge, New York & London. 1993.
- The Fantastic Art of Beksinski*. Morpheus International, Beverly Hills, CA. 2003.
- Van Oosterzee, Penny. *The Story of Peking Man*. Allen & Unwin, Crows Nest, 1999.
- Versenyi, Laszlo. *Heidegger, Being and Truth*. Yale University Press, New Haven & London. 1965.
- Walker, Michael, Burnham, Denis & Borland, Ron. *Psychology*. John Wiley & Sons, Brisbane. 2nd ed. 1994.
- White, Hayden. *Figural Realism. Studies in the Mimesis Effect*. The John Hopkins University Press, Baltimore & London. 1999.

Wollheim, Richard. *Art and its Objects: An Introduction to Aesthetics*. Harper & Rowe, New York. 1968.

Journals and Newspapers Consulted.

‘Abolition of ATSIC.’ *Examiner Newspaper*, 22 April 2004.

Archaeology. Vol. 57, No 6, November/December 2004.

‘Arrest of Serbian war leader Dragan Vasiljkovic in Sydney.’ *Weekend Australian Newspaper*. 21/22 January 2006.

Art and Australia. Vol 43, No. 1. Sept/Oct/Nov. 2005

Art Monthly Australia. No 179. May 2005

Art Monthly Australia. No 183. Sept. 2005.

Capture -Australia. Yaffa Publishing Group, Surrey Hills, NSW. May/June 2005.

‘Dirty Secrets must be revealed.’ *The Examiner Newspaper*, 20 May 2006.

Ritchie, AJex. ‘Reptiles of the Mind. The Fascination of Dinosaurs.’ *MJA. The Medical Journal of Australia. Journal of the Australian Medical Association*, December 10-24 1983. Vol. 2. No. 12. p 61.

Catalogues.

Laurence, Janet. *Glasshouse*, Sherman Galleries, Sydney. 2001.

Ruffels, Troy. (Curator/author), *A Precipitation in Time*. Daniel Crooks, Harry Nankin, Robin Petterd & David Stephenson. Devonport Regional Art Gallery, May 26 – June 25, 2006.

Documentaries, Films.

Art Show. *Fiona Hall. Mrs. McQuarrie's Folly*. ABC TV. 30 January 2005.

Beyond the Camera. Frank Hurley. The Man Who Made History. ABC TV. 7 August 2005.

Stories from the Stone Age. ABC TV. 26 January 2005.

The Seven Wonders of the Ancient World. Southern Cross TV. 23 July 2005.

The Young Poisoners Handbook. 1995. (Film). ABC TV. 6 June 2005.

Web Sites

Abbe Museum, Maine. Bone Needles.

<http://www.abbemuseum.org/choice/boneNeedle.html> (28 July 2005)

Adoue, Francis. *CABINET DE CURIOSITÉS, Les cabinets de curiosités ou le voyage immobile*. <http://thoth333.club.fr/htm/curios.htm> (30 June 2005)

Ager, Simon. *Omniglot*. 'Writing systems and languages of the world.'

<http://www.omniglot.com/writing/chinese.htm> (28 June 2005)

Anderson, Sue. *Spoilheap archaeology*, Human bones links.

<http://www.spoilheap.co.uk/hsr.htm> (4 August 2005)

Artfactsnet. *Huang Yan*, 2006

<http://www.artfacts.net/index.php/pageType/artistInfo/artist/15947#Biography> (10 March 2007)

Artnet – The art world online,

http://www.artnet.com/Artists/ArtistHomePage.aspx?artist_id=2737&page_tab=Artworks_for_sale

Beaver Frank, 'Talking about the Movies: Susan Sontag *On Photography*',

Michigan Today News, September 2005,

http://www.umich.edu/news/MT/NewsE/09_05/movies.html (18 December 2006)

Beksinski. *Gallery: Beksinski*. <http://bsd.miki.eu.org/gallery/Beksinski?page=3> (17 August 2006)

BOA Council. British Osteopathic Association.

<http://www.osteopathy.org/ot/apr/aprfeature.htm> (3 April 2004)

Boltanski, Christian. 'Christian Boltanski. Studio Visit.' *Tate Magazine*, Issue 2.

<http://www.tate.org.uk/magazine/issue2/boltanski.htm> (12 July 2005)

Cabinet de Curiosiés, Les cabinets de curiosités ou le voyage immobile.

<http://thoth333.club.fr/htm/curios.htm> (25 November 2005)

Chatters, James. Kennewick Man, 'Meet Kennewick Man.'

Nova Online. www.pbs.org/wgbh/nova/first/kennewick.html (9 May 2005)

Chinese University of Hong Kong. *Shang Dynasty Oracle Bone, Oracle bone 39*.

www.lib.cuhk.edu.hk/uclib/bones/ob39.htm (16 September 2005)

Columbia University Libraries. *Oracle Bones on Display*, C.V. Starr East Asian Library.

http://www.columbia.edu/cu/lweb/indiv/eastasian/starrnews/oracle_bones.htm

(16 September 2005)

Cordain, Loren. [Paleolithic Diet \(Paleodiet\) and Paleolithic Nutrition articles](#).
<http://www.beyondveg.com> (25 September 2005)

Day of the Dead Folk Art Gallery, Gallery 2.
<http://www.ddfolkart.com/index.html> (8 April 2004)

Dianne Tanzer Gallery. <http://www.diannetanzergallery.net.au/artist/Harry-Nankin/>
 (28 June 2006)

Du Feibao. *Origin of the Chinese Script*.
<http://www.chinavista.com/experience/hanzi/hanzi.html> (28 June 2005)

Egyptian Hieroglyphics, *Omniglot: Writing Systems and Languages of the World*.
<http://www.omniglot.com/writing/egyptian.htm> (29 June 2005)

Galerie für Fotografie, Stephanie Valantin, (11 April 2007).
<http://www.f5komma6.de/nw/artists.php?lang=en&artist=3219&show=text>

Giger, H.R. *Alien*. <http://www.hrgiger.com/alien.htm> (14 July 2005)

Gosline, Anna. 'Family words came first for early humans.' *New Scientist Print Edition*. 26 July 2004. <http://www.newscientist.com/article.ns?id=dn6188>
 (14 May 2005)

Hawass, Dr. Zahi. Secretary General of the Supreme Council of Antiquities, Egypt. Tutankhamun facial reconstruction. [http://guardians.net/hawass/Press_Release_05-05 Tut Reconstruction.htm](http://guardians.net/hawass/Press_Release_05-05_Tut_Reconstruction.htm)
 (21 May 2005)

Heisenberger, Erwin. Quantum Mechanics, 1925-1927, *The Uncertainty Principle*.
<http://www.aip.org/history/heisenberg/p8.htm> (17 July 2005)

Ivimey, Linde. *St. Tiello*. 2004.
http://www.gouldgalleries.com.au/htm_artist_image (30 September 2004)

Karrick, Katie. *How to do Gravestone Rubbings*.
<http://members.aol.com/TombView/rubbings.html> (8 June 2006)

Kren, Emil and Marx, Daniel. Web Gallery of Art Image Museum, Paintings between 1627-1630 by Franz Hals. *Young Man Holding a Skull*,
<http://www.wga.hu/frames-e.html?/html/h/hals/frans/index.html>

Martin, Gary. *Omar Khayyam*, <http://www.phrases.org.uk/meanings/365850.html>
 (28 June 2005)

Moore-Williams, John. *W.B Yeats. Ideas of Good and Evil, Awake Unsleeping Fires: Speaking the Silent in W.B. Yeats*. <http://ayjw.org/articles.php?id=760937>

(18 July 2005)

National Gallery of Australia, Canberra. *Transformations: The Language of Craft*. Patrick Hall, 11 November 2005 – 29 January 2006.

<http://www.nga.gov.au/Exhibition/Transformations/> <http://www.nga.gov.au> (15 July 2006)

National Museum of Archaeology, Anthropology, and History of Peru *Human skull showing trepanation*. <http://exchanges.state.gov/culprop/peru/human/> (13 May 2005)

Omniglot: Writing Systems and Languages of the World,

<http://www.omniglot.com/writing/logographic.htm> (28 June 2005)

Patterson, Joanne. *The Great American Life and Death of Andy Warhol*, 'Death Warholian Style.' <http://www.hatii.arts.gla.ac.uk/MultimediaStudentProjects/96-97/9340071p/project/html/page4.htm> (30 December 2006)

Puetz, Michelle. *Mimesis*. 'Theories of Media.' 2002. [The University of Chicago](http://csmt.uchicago.edu/glossary2004/mimesis.htm) <http://csmt.uchicago.edu/glossary2004/mimesis.htm> (19 January 2006)

Ramirez, Frisco. *The Ossuary in Sedlec – Kutna Hora*.

http://www.ludd.luth.se/~silver_p/kutna-info.html (20 March 2004)

Raynor, Alan. Complimentary Visions'

<http://people.bath.ac.uk/bssadmr/inclusionality/complementaryvisions.htm>

(13 June 2006)

Redgate Gallery (International) Limited. Huang Van.

<http://www.redgategallery.com/index.htm> (24 August 2004)

Reuters. 20 April 2004. <http://images.google.com> (22 April 2004)

Sapir, Edward. *Language: An Introduction to the Study of Speech*, 1921.

<http://www.bartleby.com/186/pages/pages1129htm> (15 May 2005)

Salcedo, Doris. *Unland*. www.tate.org.uk/.../dorissalcedo/default.shtm (27 March 2007)

Salcedo, Doris. *Unland* 1998.

http://www.newmuseum.org/more_exh_d_salcedo.php (7 April 2007).

Sher, Ya. A. Prehistoric Art Virtual Museum,

<http://vm.kemsu.ru/en/palaeolith/plastic/shaffo.html> (17 March 2005)

Sher, Ya. A. Prehistoric Art Virtual Museum.

<http://vm.kemsu.ru/en/palaeolith/plastic/brassempui.html> (18 March 2005)

Sherman Galleries. Janet Laurence, *Greenhouse*,

<http://www.shermangalleries.com.au/> (2 October 2005)

Smith and Co. Karl Blossfeldt Photogravures

http://www.vintagesmith.com/photos_list_live.asp?ID=14 (10 July 2006)

Smithsonian Institution Libraries, Galaxy of Images, American Discovery.

http://www.sil.si.edu/imagegalaxy/imagegalaxy_imageDetail.cfm?id_image=53

(3 December 2005)

Still Gallery. Christine Cornish. *Threshold*. 2004

<http://www.stillsgallery.com.au/exhibitions/2004/> (21 September 2004)

St Johns College, University of Cambridge. *The Art of Anatomy*,

http://www.joh.cam.ac.uk/library/special_collections/early_books/pix/anatomy/

[The Illustrations.htm](http://www.joh.cam.ac.uk/library/special_collections/early_books/pix/anatomy/The_Illustrations.htm) (22 December 2006)

Sugar skull. Sugar Skulls. <http://www.elpayaso.com/sugarsk.htm> (7 March 2006)

The World Publishing Co. Cleveland & New York. *The Illustrations from the Work of Andreas Vesalius of Brussels*, An annotated translation of the 1543 and 1555 editions of Andreas Vesalius' *De Humani Corporis Fabrica* by Daniel Garrison and Malcolm Hast. Historical introduction by Vivian Nutton. Book One released March 19, 2003. Northwestern University, Evanston, IL USA.

<http://vesalius.northwestern.edu/flash.html> (14 November 2004)

Walker Art Gallery, National Museums, Liverpool, Christine Borland, *English Family China*, 1998

<http://www.liverpoolmuseums.org.uk/walker/collections/20c/borland.asp> (10

March 2007)

Weinstein, Philip. 'Palaeopathology by Proxy: The Case of Egil's Bones.' *Journal of Archaeological Science*, Vol. 32, Issue 7, July 2005, pp 1077 – 1082.

<http://www.sciencedirect.com> (30 May 2005)

Wikipedia Contributors. *Culture*. Wikipedia.

http://en.wikipedia.org/wiki/Culture#Defining_culture (16 March 2005)

Wikipedia Contributors. *Knucklebones*. Wikipedia

<http://en.wikipedia.org/w/index.php?title=Knucklebones&oldid=130663790>

(15 May 2007)

Wikipedia Contributors. *Macrocosm and Microcosm*.

http://en.wikipedia.org/wiki/Macrocosm_and_microcosm (3rd August 2005)
<http://exchanges.state.gov/culprop/pecopyrt.html>

Wikipedia Contributors. *Oracle Bones*. http://en.wikipedia.org/wiki/Oracle_bone (16 September 2005)

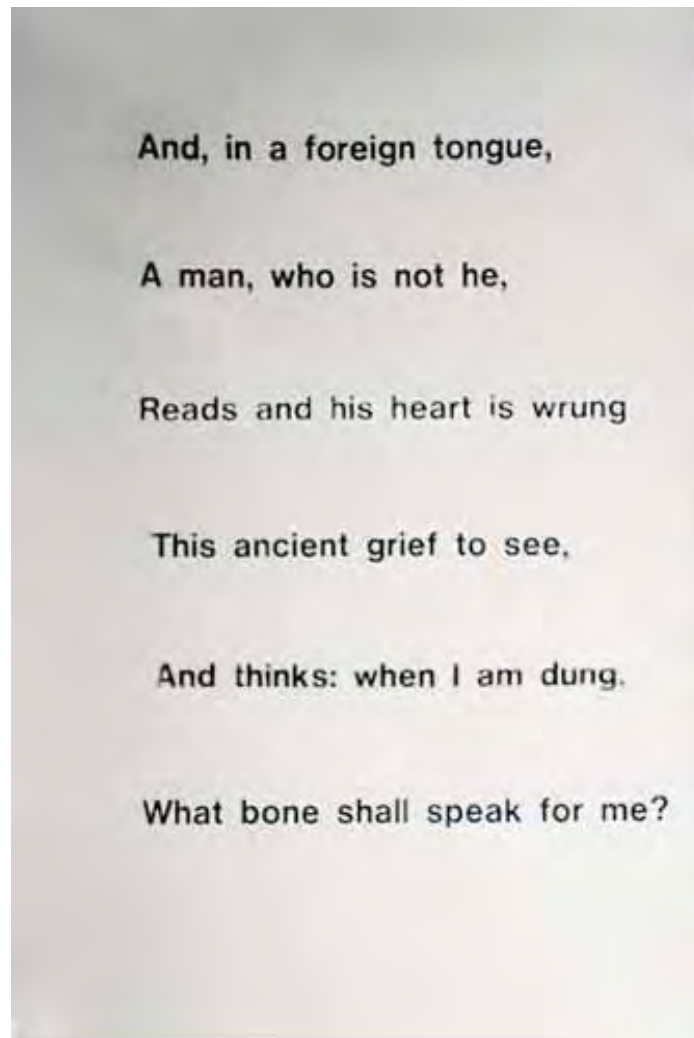
WorldofQuotes.com Historic Quotes and Proverbs Archive, Robin Skelton,
<http://www.worldofquotes.com/author/Robin-Skelton/1/index.html> (19 April 2006)

Appendix

**Selected images of Examination Show in Gallery A, Academy of the
Arts, Inveresk, Launceston.**

January 2007

The top image on p.140 has been photo-shopped to include the re-worked shelf installation.









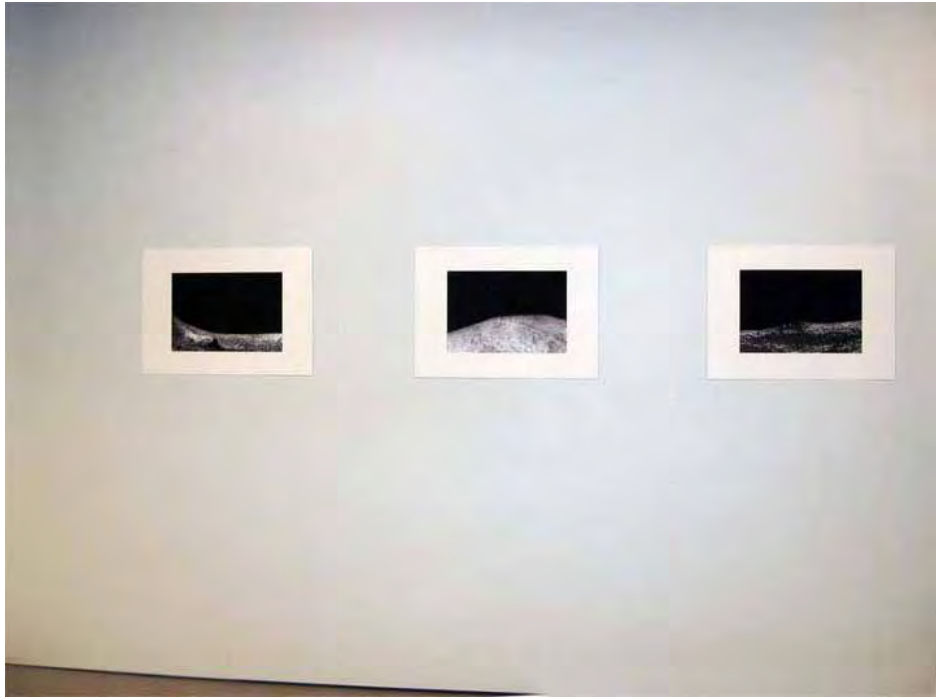


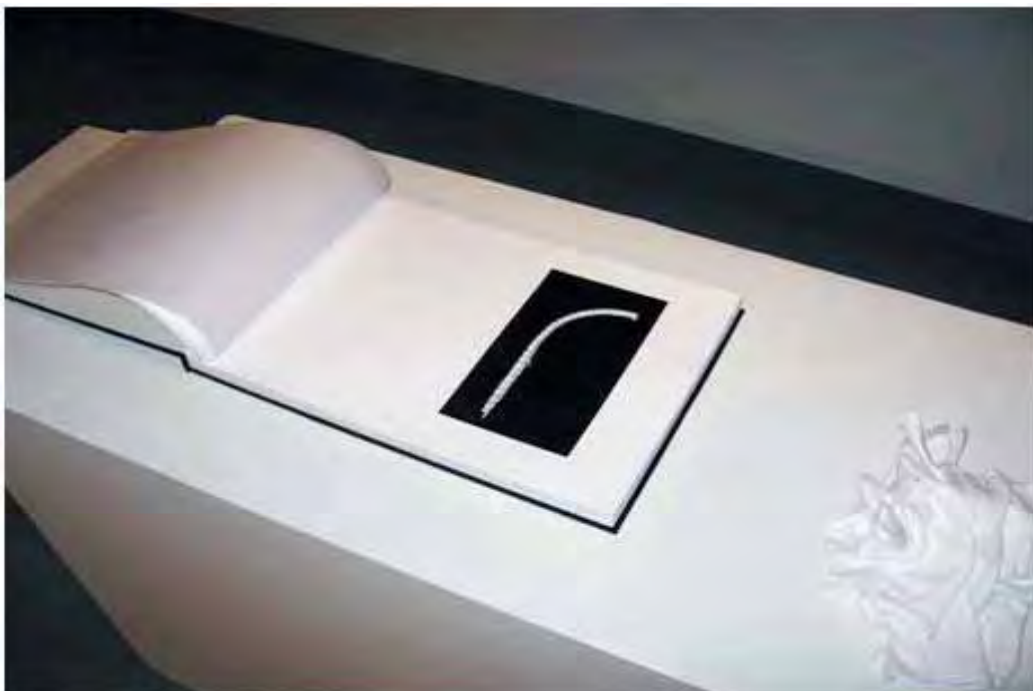
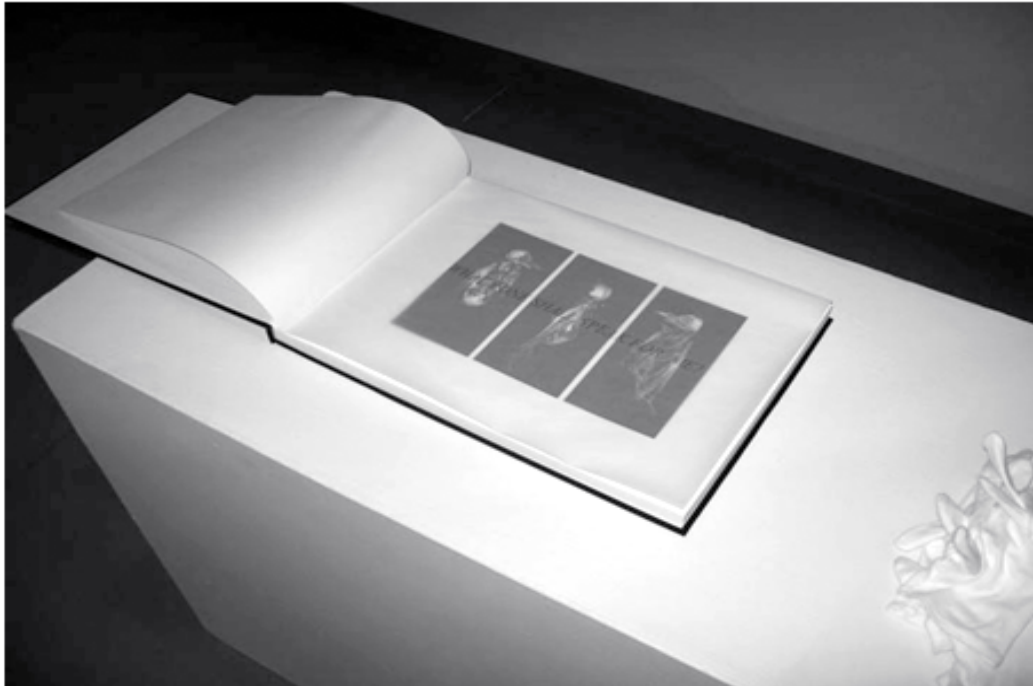


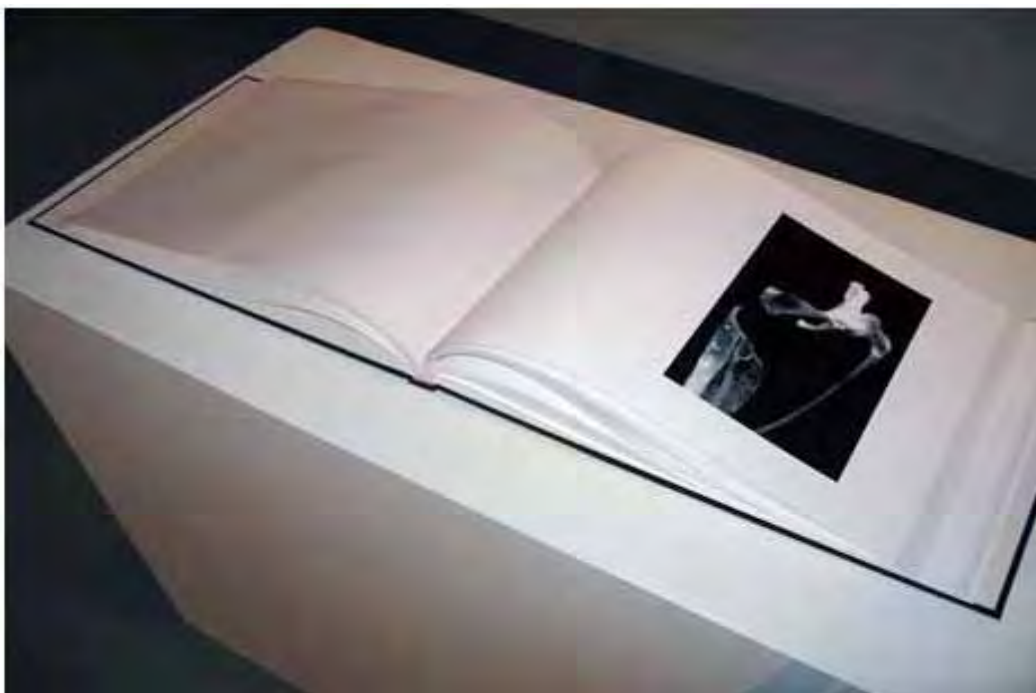
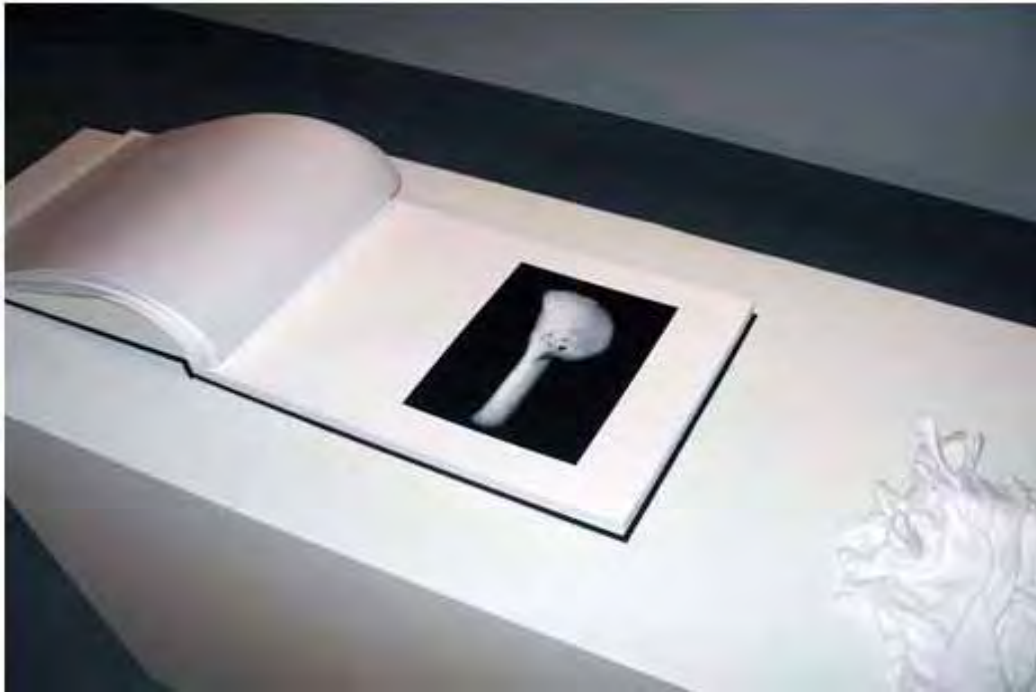


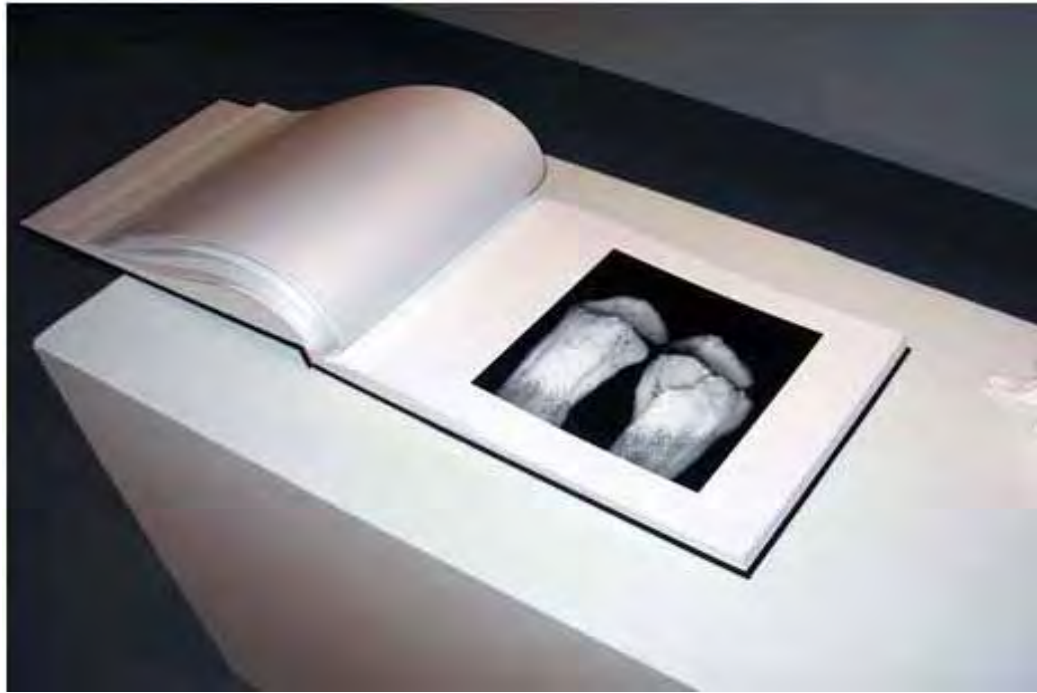










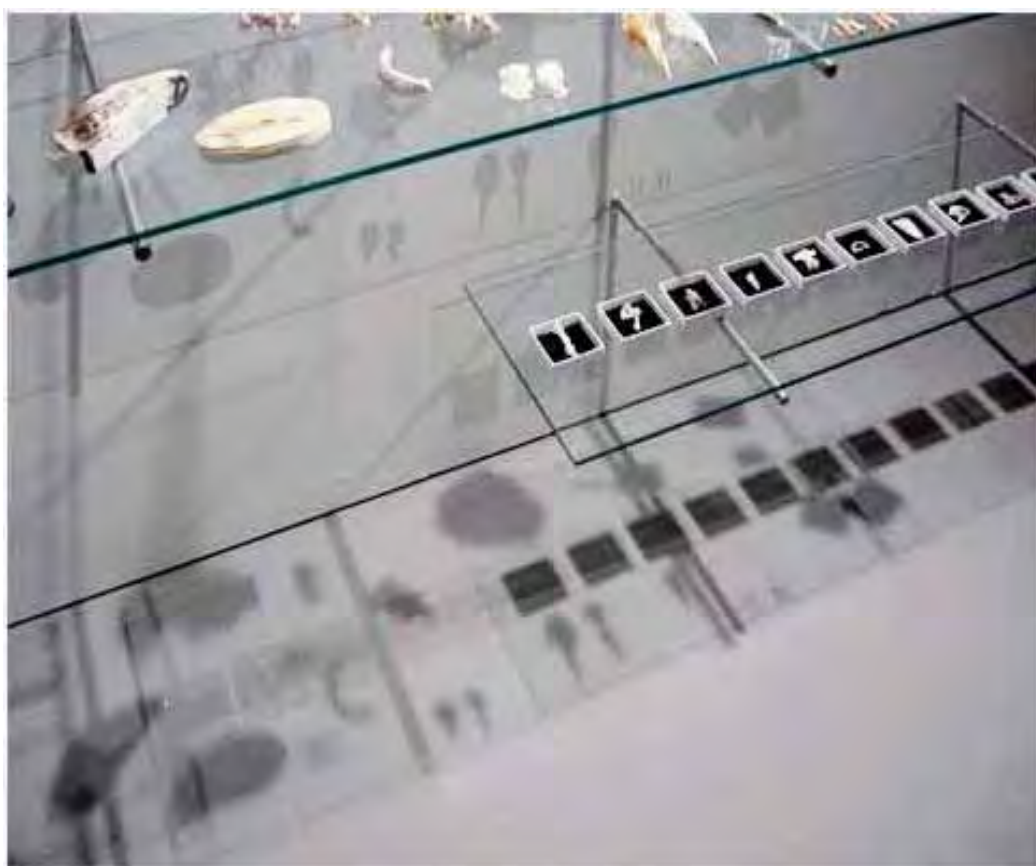












I have no history but the length of my bones